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# THE BRITISH NUMISMATIC JOURNAL 1969

#### INCLUDING THE

Proceedings of the British Numismatic Society for the year 1969

EDITED BY

C. E. BLUNT, MICHAEL DOLLEY
AND J. PORTEOUS

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# This volume is dedicated to HORACE HERBERT KING

to mark his completion in March 1969 of sixty years' membership of the Society and in gratitude for his services as a past President and as an Editor for seventeen years of this Journal

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### CONTENTS

Northumbrian Numismatic Chronology in the Ninth Century by H. E. PAGAN	1
The Anglo-Saxon Pennies from the 'Upper Souterrain' at Knowth by M. DOLLEY	16
The Stafford (1800) and Oulton (1795) Hoards by Р. н. ROBINSON	22
The Loch Doon Treasure Trove, 1966, by P. WOODHEAD, B. H. I. H. STEWART, and G. L. V. TATLER (Plate I)	31
The Attenborough, Notts., 1966 Hoard by M. M. ARCHIBALD (Plates II-III)	50
The Coinages for Ireland of Henry VIII by M. DOLLEY and W. D. HACKMAN	84
The Cloncreen Bog (Clonbulloge) Find of Elizabethan Coins from the Co. Offaly by M. DOLLEY and A. GUNSTONE (Plates IV–V)	109 ~
The Scottish Silver Coinage of Charles II by J. K. R. MURRAY	113
The Dies of Thomas Spence (1750–1814) by R. H. THOMPSON (Plates VI–VIII)	126
Three Seventeenth- and Eighteenth-Century Finds by J. P. C. KENT	163
The Origin of Spanish Dollars Acquired by Britain, 1799–1805 by J. D. A. THOMPSON	167
Seven Finds of Sixteenth- to Twentieth-Century Coins by S. A. CASTLE	174
MISCELLANEA	
Five Recently Found Ancient British Coins by H. R. MOSSOP (Plate IX)	181
A New Type for Offa by C. E. BLUNT and G. van der MEER	182
The 1912 Welwyn Find of Pence of Eadgar and of Edward the Martyr by M. DOLLEY	183
An Overstruck Penny of Edward the Confessor by P. A. HODGKINSON (Plate IX)	185
A Find of Stephen Coins at Rayleigh Mount by ROBERT SEAMAN (Plate IX)	186
The Short Cross Coins in the Ras Shamra Hoard of 1966 by D. M. METCALF	188
A New Groat of Richard II by J. W. J. ATKINSON	189
New Evidence Concerning the Authenticity of the 1655 Half-crown by D. S. FREED-MAN	190
The Gold Forty-shilling Piece of James VI of Scotland by J. K. R. MURRAY	193
REVIEWS	
Commentationes de nummis saeculorum IX-XI in Suecia repertis, ii (H. R. Loyn)	195
C. E. Blunt and M. Dolley, Sylloge of Coins of the British Isles, Reading and Stockholm (H. de S. Shortt)	196

#### CONTENTS

J. Porteous, Coins in History (P. Spufford)	196
J. L. Wetton, Seventeenth Century Tradesmen's Tokens (W. Slayter)	197
Other Library Accessions	198
Proceedings and Exhibitions	200
Presidential address—Historical Problems of Anglo-Saxon coinage—(3) Denominations and Weights	204
The President's Review of the Year	223
Accounts for the Year ended 31 October 1968	226
List of New Members and Changes of Address	228
Index	230

# NORTHUMBRIAN NUMISMATIC CHRONOLOGY IN THE NINTH CENTURY

H. E. PAGAN

The subject of this paper is the coinage struck in Northumbria in the ninth century by the kings of Northumbria and by the archbishops of York. The coins are normally described as sceattas if their appearance is silvery and as stycas if they are predominantly copper. They will be familiar to most numismatists. What I propose to do is to review the coinage as a whole and offer a scheme for a major redating of most of the coins. It may be reassuring to know that the proposal though drastic is not altogether revolutionary. The circumstances are peculiar. In an article published in the *British Numismatic Journal* thirteen years ago<sup>2</sup> Mr. C. S. S. Lyon arranged the coins in their proper chronological order and established with reasonable accuracy the period of time for which each king and archbishop struck. It would be reasonable to suppose that this would make a substantial redating of the coinage impossible. In fact for a variety of reasons it does not. Without rejecting any of Mr. Lyon's main conclusions it will be possible to adopt a scheme of dating that looks very different from the scheme which has been accepted until now; and this is the course of action for which I shall be arguing.

An initial difficulty of any discussion of the problems involved is that this is a pointage that for one reason or another people do not take very seriously. Partly this is because the coins are not themselves attractive. Partly this is because the coins are very common. and familiarity breeds contempt. A number of factors combine to make them unpopular-It may be that some of this unpopularity is deserved—there are certainly coimages of greater significance-but it is not altogether deserved. Much of the trouble stems from an accident of history. A Viking army captured York on 1 November 867, and Scandinavian occupation of northern England in the years that followed descroyed the civilization for which the so-called styca coinage had been struck. The records of every community north of the Humber were lost. The administrative system of the kingdom collapsed. The royal family which had ruled in York for two hundred years came to an end.3 The old frontiers of the kingdom changed. It was sixty years before am imdependent Anglo-Saxon king again ruled in York and there can by them have been were little to recall the ninth-century kingdom. By the time historians got round to writing the history of that kingdom there was still less. As a result there is practically moulting to show that the kings and archbishops for whom the coins were struck were people of flesh and blood and it is difficult in the circumstances to see the study of the coins as more than an academic exercise. If the information at our disposal about minute-century, Northumbria were more detailed the position would be very different. There is moltrarig inherently uninteresting about the coinage of Northumbria. Northumbria was after all a kingdom of vast size and great traditions. For generations the authority off its lings

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<sup>&</sup>lt;sup>1</sup> This is a slightly revised version of a paper read to the British Numismatic Society on 25 Mar. 1969.

<sup>&</sup>lt;sup>2</sup> BNJ xxviii, pt. 2 (1956), pp. 227-42.

<sup>4.</sup> There were kings in Nonchambria after 367 but it is not clear that they were kings of Nonthambria and they were not of the oid could house.

#### 2 NORTHUMBRIAN NUMISMATIC CHRONOLOGY IN THE NINTH CENTURY

had been recognized throughout northern England and the Scottish Lowlands, in Edinburgh and in Carlisle as well as in York and Bamburgh. At the beginning of the ninth century the Northumbrian kingdom still stretched from the Humber to the Firth of Forth and from the North Sea to the Irish Sea; the authority of the archbishops of York was still recognized by the bishop of Whithorn in Galloway and by the bishop of Mayo in Ireland as well as by bishops of Hexham and Lindisfarne; and there was an enormous respect on the continent of Europe for the tradition of scholarship and learning associated with the country of Bede. In the course of the ninth century this power and prestige may have diminished; but even in decline it must have been a kingdom of importance.

The pity is that there is this lack of information about it. Up to 806 the succession of events in Northumbria can be established from a series of entries added in the eleventh century to one version of the Anglo-Saxon Chronicle, originally compiled at the end of the ninth century, and from entries in a twelfth-century compilation known as the History of the Kings and attributed to the historian Simeon of Durham. The entries in this compilation and the entries in the Anglo-Saxon Chronicle are derived from the same source, a detailed chronicle begun in Northumbria towards the end of the eighth century and kept up to date until 806. After 806 the situation is different. There are no entries in any version of the Anglo-Saxon Chronicle about the internal affairs of Northumbria between 806 and 867. The information about Northumbria in the History of the Kings and in other historical works attributed to Simeon of Durham dwindles to information about the succession and death of its kings evidently extracted from a document much less authoritative than the chronicle on which the earlier entries are based. There is some information of much the same character in a work called the Flores Historiarum compiled in the thirteenth century by Roger of Wendover; it is not obviously more authoritative. Otherwise there is an occasional reference to Northumbrian affairs in documents not primarily concerned with Northumbrian history; some of these are interesting but they do not add up to very much. There is little here to show that the issuers of the coinage once had real existence.

Such a state of affairs is not satisfactory. But it has one quite salutary effect. It throws the numismatist back on his own resources. If he wants to convince himself that these were kings who really reigned and archbishops who really presided over the Northumbrian church his course of action is clear. The most tangible evidence for the existence of these kings and archbishops is the existence of coins carrying their names. These coins were struck in the ninth century, so their evidence is likely to be reliable; they are also very common, so their evidence is likely to be easy to interpret. It will be sensible in the circumstances to take as a point of departure in establishing the chronology of the ninth century coinage of Northumbria the evidence the coins themselves provide and only then to consider the historical framework for them that documentary sources provide.

The coins fall broadly into two groups: coins of a silvery appearance in the names of King Eanred and Archbishop Eanbald and coins of a coppery appearance in the names of Kings Eanred, Æthelred, Redwulf, and Osberht, and Archbishops Wigmund and Wulfhere. From the entries in the *History of the Kings* and the *Anglo-Saxon Chronicle* for the years before 806 and from an entry in the original ninth-century portion of the *Anglo-Saxon Chronicle* for 867—entries on the accuracy of which it is possible to rely

without need of argument—it is known that Archbishop Eanbald belongs at the beginning of the period and that King Osberht belongs at the end of the period. This is enough to establish the order in which the coins of the various issuers after 806 should be put. It is uncontroversial that the order of the coins of the kings is: silvery coins of Eanred, coppery coins of Eanred, coppery coins of Æthelred, coppery coins of Redwulf, some more coppery coins of Æthelred, coppery coins of Osberht. It is uncontroversial also that the order of the coins of the archbishops is: silvery coins of Eanbald, coppery coins of Wigmund, coppery coins of Wulfhere. There are die-links to show the correctness of most of the steps in this arrangement and where there are not die-links there is satisfactory hoard evidence and moneyer evidence. Just as clear is the relation of the coins of the archbishops to the coins of the kings. The silvery coins of Eanbald are contemporary with the silvery coins of Eanred; the coppery coins of Wigmund are contemporary with the coppery coins of Eanred and the first group of coins of Æthelred; and the coppery coins of Wulfhere most resemble the second group of coins of Æthelred and the coins of Osberht. The evidence for this is set out by Lyon in his article already mentioned.

So the coins provide a list of kings that goes Eanred, Æthelred, Redwulf, Æthelred, Osberht and show that Eanbald was archbishop during the reign of Eanred; that Wigmund became archbishop while Eanred was still king and lived on into the reign of a king Æthelred; and that Wulfhere was archbishop round about the time Osberht became king. There is as it happens no continuity between the coins of Eanbald and Wigmund, and no continuity between the coins of Wigmund and Wulfhere; it would be possible for an archbishop for whom no coins are known to have intervened between Eanbald and Wigmund or between Wigmund and Wulfhere. In the list of the kings an additional ruler could only be added at either end, for from the start of the coppery coinage of Eanred down to the coinage of Osberht the coinage of the kings is unbroken. It would be honest to add that there is a candidate for a position at the beginning of the regnal list. In addition to the coins mentioned there occur in hoards deposited in the ninth century one or two silvery coins of a king Æthelred. They do not much resemble the coppery coins of Æthelred and in view of the fact that the issue of silvery coins seems to have ceased in the middle of the reign of Eanred the obvious thing to do with them is to ascribe them to another king Æthelred who might have been Eanred's immediate predecessor; but the History of the Kings and the Anglo-Saxon Chronicle show that before Eardwulf (796-806)—of whom incidentally no coins are known there was a king Æthelred (790-6) to whom these coins might rather belong, and since not very many of them are known it is proper to reserve judgement on them for the moment.

We can now approach the documentary evidence with some idea of the chronological structure that it ought to present. The essentials of this evidence are set out in the tables on pp. 4 and 5. It will be seen that the order of events which it presents is not incompatible with that already established from the coins. In the period from 806 to 867 with which we are concerned two new kings, Ælfwald and Ælla, emerge, but they belong at the beginning and the end of the period and do not interrupt the succession of kings that has been worked out. The suggestion that there might have been a king Æthelred immediately before Eanred is not borne out, but this was only a suggestion. The information provided about Redwulf's brief usurpation explains why the coppery coins

#### 4 NORTHUMBRIAN NUMISMATIC CHRONOLOGY IN THE NINTH CENTURY

of Æthelred fall into two groups divided by those of Redwulf. As for the archbishops, it has already been noted that an archbishop who did not strike coins might intervene between Eanbald and Wigmund and Wulfsige's appearance in this position is therefore quite credible.

#### Documentary Evidence for Kings of Northumbria

Left-hand column gives date of accession; centre column length of reign; right-hand column fate of ruler concerned

Eardwulf	14 May 796 (ASC SD)	10 (SD)	deposed 806 (ASC SD) 808 (RW)
Ælfwald	806 (SD) 808 (RW)	2 (SD) 2 (RW)	died 808 (SD) 810 (RW)
Eanred	808 (SD) 810 (RW)	33 (SD) 32 (RW)	died 841 (SD) 840 (RW)
Æthelred	841 (SD) 840 (RW)	8 (SD) 7 (RW)	killed 849 (SD) 848 (RW)
Redwulf	844 (RW)	6.	killed 844 (RW)
Osberht	849 (SD) 848 (RW)	13 (SD) 18 (RW)	deposed 862 (SD) 867 (ASC RW)
Ælla	862 (SD) 867 (ASC RW)	5 (SD)	killed 867 (ASC SD RW)
Ecgberht	867 (SD RW)	6 (SD RW)	died 873 (SD RW)
Ricsige	873 (SD RW)	3 (SD RW)	died 876 (SD RW)
Ecgberht	876 (SD RW)	not stated	not stated

Additional information given by ASC SD and RW:

- 1. Eanred was son of Eardwulf (SD RW).
- 2. Æthelred was son of Eanred (SD RW).
- Æthelred was deposed in 844; Redwulf succeeded but shortly afterwards was killed in battle with 'pagani' (Vikings) at 'Ælvitheia'; and Æthelred then recovered the throne (RW).
- 4. In 867 there was civil war in Northumbria. Osberht had been deposed in favour of a rival Ælla 'with no hereditary right', but retained some support. After the Viking capture of York Osberht and Ælla united their forces and attacked the Vikings there. They were defeated and both were killed (ASC).
- Ecgberht was driven out of his kingdom in 872 (SD RW) and took refuge at the court of Burgred of Mercia (RW).

But it will be necessary to take a rather harder look at the documentary evidence than this. Study of it is rewarding. It should first be explained how these tables are made up. RW stands for Roger of Wendover's Flores Historiarum. As the title suggests this is a collection of extracts from a number of earlier historical works. These are arranged under the year to which the event mentioned in the extract belongs; which means that the information about Northumbrian history has to be picked out of a larger volume of material. Fortunately this is relatively easy¹ and it is possible to establish the nature of the document from which the extracts came. It was a register of events in Northumbria between 806 and 876—the information Roger gives about the death of Archbishop Wulfhere in 895 must come from another source—and a typical entry in it took the form '840. Eanred died and his son Æthelred succeeded him and reigned for seven years'. The entries apparently referred only to the succession of kings, archbishops, and bishops of Lindisfarne. The relevant information they contain can be set out in tabular form without difficulty.

<sup>1</sup> In English Historical Documents c. 500-1042 (1955), p. 256 Prof. Dorothy Whitelock treats as coming from the same source as the information about Northumbria a note that in 848 there was an eclipse of the sun at the sixth hour of the day on the

1st of October. But there seems no real reason to suppose this; and in any case there was no eclipse on 1 October 848 or on any other 1st October in the ninth century (information from Royal Greenwich Observatory).

SD stands for Simeon of Durham. Here the position is complex. Three works attributed to Simeon of Durham contain information about Northumbria after 806: the History of the Kings, the History of the Church of Durham, and the Letter on the Archbishops of York. In the History of the Kings the information is set out quite clearly and

#### Documentary Evidence for Archbishops of York

Left-hand column gives date of consecration; centre column length of episcopate; right-hand column date of death

Eanbald	14 Aug. 796 (ASC SD)	not stated	not stated
Wulfsige	not stated	not stated	831 (RW)
Wigmund	831 (RW)	16 (SD)*	854 (SD RW)
Wulfhere	854 (SD RW)	39 (SD)	892 (SD) 895 (RW)

\* SD says that Wigmund died 'in the sixteenth year of his episcopate'. He does not say when the episcopate began, but presumably he thought that it began in 838. There seems to be no authority for the date 837 normally given for Wigmund's appointment.

There exist in addition two letters written to ninth-century archbishops of York, One is a letter from Bishop Ecgred of Lindisfarne (whom SD dates 830-46) to Archbishop Wulfsige. It is not dated and there is no indication in the text that might date it. The other is a letter from Lupus, Abbot of Ferrières (France), to Archbishop Wigmund. It is not dated, but it was certainly written in or after 849, and there is a case for saying that it was written in 851 at the same time as some other letters written by Lupus to English correspondents. Translations of them are printed by Whitelock, English Historical Documents c, 500-1042 (1955), pp. 806-10,

is easy to evaluate. But unfortunately the History of the Kings covers only part of the period. It is a composite work by several hands<sup>1</sup> and the sections written by different writers do not dovetail into each other. One writer produced a narrative of Northumbrian affairs for the years 732-802 based on the chronicle that gave information about Northumbria up to 806. Information about Northumbria later in the ninth century comes in a different section of the work, produced by a historian writing at Durham in the twelfth century, the Simeon of Durham to whom the whole work has been attributed in error. As it happens his narrative—which is based mainly on the Chronicon ex Chronicis attributed to Florence of Worcester and only incidentally on a document with Northumbrian connotations—begins not in 802 or 806 but only with the birth of Ælfred of Wessex in 848/9. In consequence in the History of the Kings the first entry relating to Northumbria in the period from 806 onwards is an entry that covers the events of 854; events in Northumbria in 848 or 849 fall outside the section's scope because Simeon deals only with the birth of Ælfred in his entry for 848/9.

To fill the gap between the beginning of the ninth century and 854 it is necessary to turn to the History of the Church of Durham and the Letter on the Archbishops of York. These are by the same twelfth-century historian—Simeon—as the section of the *History* of the Kings that begins with the birth of Ælfred; and unlike his section of the History of the Kings they cover the entire ninth century. A study of them reveals that they contain a substantial body of information about Northumbria from 806 to 854 (and indeed from 854 onwards), and as it is of the same character as that in Simeon's section of the History of the Kings it is reasonable to suppose that Simeon possessed a document that gave information about Northumbria both before and after 854 and that if the information in all three works is added together this will shed light on the contents of that

<sup>&</sup>lt;sup>1</sup> P. Hunter Blair, Some Observations on the 'His- and Saxon, ed. Chadwick (1963), pp. 63-118, gives a toria Regum' Attributed to Symeon of Durham, in Celt clear account of this complex work.

document. Determining its exact nature is made difficult by the way in which he wrote the works on Durham and York. These works were primarily concerned with the history of those dioceses and the information they contain about kings of Northumbria is introduced mainly to date episcopal changes. Where the document used had two entries that read something like '841. Eanred died and was succeeded by his son Æthelred' and '846. Bishop Ecgred of Lindisfarne died and Eanberht succeeded' Simeon runs them together to produce a sentence relevant to the history of Durham (or rather of Lindisfarne, in the ninth century the seat of the bishops later established at Durham) that reads 'In the sixteenth year of his episcopate, which was the fifth year of King Æthelred who had succeeded his father Eanred, Eggred died and Eanberht, elected in his place, governed the church for eight years.' But although this makes the wording of the document in the years before 854 difficult to establish it is quite easy to judge its content by reducing the factual information in all three works to tabular form. It emerges that it was a register of events in Northumbria between 806 and 876 dealing only with the succession of kings, archbishops, and bishops of Lindisfarne in which a typical entry indicated the death of a king or bishop, named his successor, and gave the length of that successor's tenure of office. The parallel with the document used by Roger of Wendover is striking.

From here it is an easy step to the conclusion that the document used by Simeon of Durham was in fact the same as the document used by Roger of Wendover. One argument is by itself decisive. Comparison of the entries in both writers for the period beginning 854 when Simeon reproduces his document in a full form shows that although the actual words in which they phrase these entries differ—not very surprisingly, for historians normally use their own turns of phrase when they incorporate in their works information set out by others—the structure of the entries is unmistakably the same.1 It is impossible that this could be a coincidence. There are other indications that point the same way. Roger and Simeon may not agree on the dates of the events but they agree on their order; they agree about the way each king's reign came to an end, e.g. that Eanred died but that Æthelred was killed; and they agree in not giving the date when Archbishop Eanbald was succeeded by Wulfsige. Where there are differences between them it is usually possible to find an explanation of a comparatively simple nature. Some of them are differences caused by Simeon's rather confusing way of treating the material at his disposal. Others are differences that can be put down to careless copying of the entries in the original document; Roger and Simeon presumably worked from different copies of it and these might have suffered considerable alteration in the copying process. It is not necessary for present purposes to go into these differences in detail, but it should perhaps be indicated where one should believe Simeon and where one should believe Roger. Simeon seems to be right in putting the accession of King Ælfwald in 806 and that of King Eanred in 808; it can be seen from the reign length Roger gives Eanred that Roger's arithmetic is rather confused at this point. Roger seems to be right about the length of Osberht's reign and its relation to that of Ælla; I think that in the copy of the document Simeon used the length of Osberht's reign was by mistake given as thirteen years (XIII in Roman figures) rather than as eighteen years (XVIII in Roman figures) and Simeon decided at some stage to give Ælla a reign of five years to fill the gap. He only gives Ælla this reign of five years in his History of the Church of Durham;

<sup>&</sup>lt;sup>1</sup> The entries in each writer for 872 and 873 show this best.

in his History of the Kings Ælla is not given a reign length. The disagreement between Simeon and Roger over the dates between which Æthelred was king is not easy to resolve. I should be inclined to adopt the dates given by Roger if it were not for the fact that he has a reign length for Æthelred a year shorter than he should. Perhaps he has subtracted a year to allow for the insertion of Redwulf. But it is not important to decide on the point.

What is important is the identity of the document used by Roger with the document used by Simeon. The relation between the information given by Roger and that given by Simeon has not been reviewed before and historians have tended in the past to assume that the reason why they broadly agree is because the information they give is broadly correct. Now that it is recognized that they agree because they make use of copies of the same document it is no longer necessarily the case that the information given is correct. Their agreement establishes only what the entries in the document used were; it does not establish the accuracy of these entries. This is a discovery that is vital for the study of the coinage. It has been noted that the order of kings and archbishops set out by Roger and Simeon is compatible with that indicated by the coins. Obviously Roger and Simeon had access to information about Northumbria that was comparatively reliable. The question is: how reliable is this information? As long as it was thought that Roger of Wendover's Flores Historiarum provided independent corroboration of the information given by Simeon it was reasonable to suppose that the information given was not just comparatively reliable but almost completely reliable. In consequence, where the evidence of the coins was difficult to reconcile with that presented by Roger and Simeon we had to master our natural inclinations and fit the coins by hook or by crook into the framework Roger and Simeon offer. This is not in the new situation obligatory. Close attention must still be paid to the scheme Roger and Simeon present but its authority will not be compelling. Where the coins and it are in apparent disagreement it will be necessary to weigh the evidence of both with equal care.

One's doubts about the relation of the coins to this scheme follow from some conclusions reached by Lyon. In trying to sort out the confusion in which the coinage had been left by numismatists of an earlier generation he concentrated on the two reigns of Æthelred and on the reign of Redwulf and produced an admirable scheme for dividing Æthelred's coins between his two reigns. He gave less attention to the coins of Eanred and Osberht but one of his lines of approach was important. He showed that it was possible to calculate the duration of the coppery coinages of Eanred and Osberht by comparing the number of dies used in their production with the number of dies used in the two reigns of Æthelred and that of Redwulf; the comparison is reasonable because the rate at which dies were used seems to have been much the same at any one time under any of these kings. Given that the coinages of Æthelred and Redwulf covered a period of eight years one can calculate that the coppery coinage of Eanred lasted for about five years and that the coinage of Osberht lasted for two or three years. On the chronology set out in the tables this will mean that Eanred's coppery coinage began about 835-it die-links into that of Æthelred-and that Osberht's coinage-which dielinks into the other end of Æthelred's coinage-stopped about 851. The first of these calculations is interesting, in that it suggests that a major portion of Eanred's coinage belongs to the end of his reign and therefore that his coinage may not have started as early as 808. The second is devastating. The traditional assumption has been that the

Northumbrian coinage came to an end on the fall of York in 867. Here we have the coinage of Osberht, the last king for whom coins are known, coming to an end just after 850, although he was certainly king in the 860s and was still alive in 867. Confronted by this situation Lyon was forced to conclude that the striking of coin in Northumbria stopped some fifteen years before the fall of York; it may not have stopped exactly in 851, for there exists a small group of imitative and barbarous coins apparently later than those of Osberht the striking of which may have continued for a year or two, but it was certainly over by 855. Lyon invited historians to find some political or economic explanation of this curious state of affairs.

The calculation had another unpleasant consequence. If the issue of coins by the kings of Northumbria came to an end in 851 the coins of Archbishop Wulfhere (consecrated 854) are left very much out on a limb. It does not seem likely that the archbishop could have coined two or three years after the royal mint had closed for good. Lyon decided that Wulfhere must have become archbishop not in 854 but a few years earlier. He found a die-link connecting a coin of Archbishop Wulfhere with a coin of the second reign of Æthelred as well as with coins of Osberht and this encouraged him to put Wulfhere's consecration about 849 and to treat the date of 854 given for it by Simeon and Roger as a copyist's error. The style of the coins of Wulfhere is slightly superior to that of the coins of Osberht and this was another factor in putting them as near as possible to those of Æthelred. There are unfortunately difficulties in the way of this neat solution. The date 854 is agreed on by Simeon and Roger: can it be altered unilaterally without disturbing all the other dates given by them? Moreover, moving Wulfhere's consecration from 854 back to 849 will have its effect on the dates of his predecessor Wigmund: should we follow Simeon and calculate a period of sixteen years for Wigmund's episcopate backwards from 849? Should we leave Wigmund's consecration around 838 and shorten the length of his episcopate? Or should we follow Roger and reject Simeon's evidence altogether? There is also the serious difficulty presented by the letter of Abbot Lupus. It is addressed to Archbishop Wigmund, not to Archbishop Wulfhere; it could not possibly have been written earlier than 849; a reference in it to 'the grace of peace . . . now beginning' suggests that it was written after a great Viking raid in 850 that devastated northern France and south-eastern England; and in fact it may have been written in 851. Lyon's line of argument seems to raise as many difficulties as it solves. Still, this difficulty should not be allowed to get out of proportion. Some solution of the same general character as that proposed by Lyon might work—we could for instance leave Wulfhere where he is and move Osberht's accession a year or two later—and while there is this possibility there is no cause to look further. This is not a difficulty that demands an elaborate rethinking of the evidence of the coins or a general reappraisal of the dates given by Roger and Simeon.

The real doubts about the situation arise from Lyon's main conclusion: his conclusion that the Northumbrian coinage came to an end in the 850s. This is a conclusion that has been generally accepted by numismatists and has not caused historians any disquiet but the conclusion is still one which it is hard to accept. The coinage concerned was not replaced. It is very difficult to see what circumstances could have brought to an end before 867 the striking of coins in an area in which finds show that coin had been the general medium of exchange. It is true that it is not impossible to find an explanation if an explanation has to be found. There are two possibilities, It is possible that by 850

the capacity of the kings of Northumbria to exercise effective political control over their kingdom had so far diminished that Northumbria was in a permanent state of civil war which discouraged the striking and use of coin. Alternatively, the kings may not any longer have been able to maintain public confidence in the coins they issued; the silver content of these had fallen in the course of the ninth century from something like 60 per cent to something under 5 per cent, and to judge from the vast numbers of coppery coins that survive the purchasing power of the individual coin was by the reign of Osberht excessively small. But neither explanation is altogether satisfactory. It would be very much easier if a way could be found of bringing the coinage of Northumbria to an end in 867.

With the chronology as it stands this is impossible. Any scheme for prolonging the issue of the Northumbrian coinage up to 867 will involve moving the issue of Osberht's coinage from the three years 848-51 to a three-year period nearer 867; and this cannot be done so long as the date of Osberht's accession remains in 848 or 849, for there are die-links between coins of Osberht and coins of the second reign of Æthelred which show that Osberht's coinage began at the moment he became king. So if we really want a Northumbrian coinage in the 860s it will be necessary to throw over the chronology of Roger and Simeon and say that Æthelred died and Osberht became king not in 848 or 849 but at some point in the 860s, say 862 to allow his coinage to end c. 865 and the period from 865 to 867 to be occupied by the barbarous and imitative issue mentioned earlier which although barbarous was struck at the mint of York. The havoc that this will create will be considerable. It will be necessary to move forward some of the earlier dates by much the same amount, for if they are left where they are Æthelred would have a second reign of eighteen years and apparently only four years coinage to fill it. A tentative scheme of dating based on the apparent durations of the coinages of the kings concerned would put Æthelred's second reign in 858-62; Redwulf in 858; Æthelred's first reign in 854-58; and Eanred in the period up to 854. Note that although the duration of Eanred's coppery coinage is calculable as five years the duration of his coinage as a whole is not known; 2 so it would be equally possible to leave his date of accession as 808 or to move it forward. If it is moved forward by the same amount as the other dates he would come to the throne in about 821.

Now this may seem a rash proposal. No evidence has so far emerged that justifies such treatment of the chronology set out by Roger and Simeon and a feeling of unease about bringing the coinage to an end just after 850 does not by itself entitle one to fly in the face of apparently sound historical fact. Nevertheless, it will emerge that this is a scheme of dating that both can and should be adopted. There is a volume of evidence, much of it of a substantial kind, to show that coins were struck in Northumbria in the 860s and that the kings for whom they were struck reigned at times other than those assigned them by Roger and Simeon. And if this is clearly the case it would be ridiculous to allow Roger and Simeon's chronology to stand in the way; it has already been shown that they are confused to a greater or less degree over the relative dates of Osberht and

the coinages demands durations of a very limited length.

<sup>1</sup> These exact durations are calculated on the assumption that the reign lengths Roger and Simeon assign to the reigns of Æthelred and Redwulf are correct. If these reign lengths are not correct the durations given may not be absolutely accurate, but they must be fairly accurate, for the make-up of

<sup>&</sup>lt;sup>2</sup> The length of Eanred's silvery coinage is difficult to calculate, for it is not tightly die-linked; and it is also difficult to make out whether the coppery coinage succeeded it immediately or only after a period of time.

Archbishop Wulfhere and it has also been established that Roger does not in any real sense corroborate Simeon or vice versa.

In presenting a case for this revised chronology we can begin with the hoard evidence. With the exception of the great Hexham find of 1833, which was deposited at the beginning of Æthelred's second reign, all known hoards of ninth-century Northumbrian coins end with coins of Osberht. The most important of these are the Ripon (1695) find; the Kirkoswald, Cumberland (1808) find; a find made in St. Leonard's Place, York, within a stone's throw of York Minster, in 1842; a hoard found beside the banks of the River Wharfe at Bolton Percy, between York and Tadcaster, two-thirds of which came to light in 1846 and another third in 1967; and a small find made at Talnotrie in Galloway in 1912. The last is important because it is the only one to contain non-Northumbrian coins by which the Northumbrian coins can be dated. It comprised half a dozen coins of Northumbria-of Æthelred II, Redwulf, Osberht, and Wulfhere-four pennies of Burgred of Mercia, two Abbasid dirhems, and one XPISTIANA RELIGIO denier in the name of Louis the Pious. The four coins of Burgred were struck between 868 and 870, so the deposit of the hoard can be put in the bracket 870-5. It is a shock to find as the largest element in a hoard deposited this late a group of Northumbrian coins the issue of which on the existing chronology had stopped around 854. One explanation for their presence would be that the amasser of the hoard was indifferent to their use as currency and had retained them for this long period of time for their value in barter transactions, but since all the coins involved are of the coppery series and have therefore little intrinsic value this is not probable. Given that the hoard is an archaeological unity its composition indicates either that such coins continued to be used as currency long after the striking of them had stopped or that they had been struck rather nearer the period 870-5 than the existing chronology allows. I have no doubt which of these alternatives is preferable. It is not inherently likely that the coins of the Northumbrian kings continued to circulate after the striking of coin had stopped; and in any case such a state of affairs is not compatible with the structure of such hoards as have been discovered. If circulation continued the coins of which the greatest number had been struck—the coppery coins of Eanred and Æthelred—might be expected to become increasingly predominant in hoards as the advantage of being recently struck possessed by the coins of Osberht became with the passing of time less important. This is not the case. All the hoards are of a structure such that the coins of Osberht and Archbishop Wulfhere and the barbarous issues contemporary to these are much more numerous than they should be if the volume of coin struck was an important factor influencing the relative number of coins of each issuer present. It follows that all were deposited either when striking stopped or very shortly afterwards and that circulation did not continue. So the most rational explanation for the composition of the Talnotrie hoard is that the Northumbrian coins it contains were struck at a period later than they are presently dated and this will involve moving the date of Osberht's accession later than 849.

This rather tenuous evidence—the Talnotrie hoard is very small and its interpretation controversial—can be fortified by considering the hoard evidence as a whole. The other hoards may not contain any extraneous material by which they can be dated, but the fact of their existence is important. A break in the coinage does not automatically involve the deposit of hoards. The metallic content in coins makes them useful after they cease to circulate even if they have no intrinsic value, for they can be melted down and

employed for some different purpose; and in a country like England where supplies of metal are hard to come by one would expect that holders of substantial quantities of coin would do just this. In this instance, however, hoards were deposited. Why? The distribution of finds shows that all over Northumbria both in communities like York and Ripon and in remote upland districts people made no effort to convert their stocks of coin to any practical use but instead more or less immediately after the cessation of striking hid them in the earth. This very much suggests that the issue of coin was interrupted not by some administrative breakdown but by some violent disturbance. And once the deposit of these hoards is put down to some such event it would be perverse to dissociate their deposit from the Viking invasion of 867. A separate, earlier disturbance might account for the intermission of striking, but it would not account for the simultaneous deposit of these hoards, and their number, too, suggests that the disturbance was not an ordinary civil commotion but something which permanently prevented people recovering their valuables and beating them into swords and ploughshares. A Viking invasion fits the bill. Combining the date of 867 for the deposit of these hoards with the conclusion already reached that the hoards were deposited more or less when the striking of coinage ceased we must conclude that Osberht's coinage was being struck until 867 or shortly before 867.

My other arguments are less theoretical. There are certain obvious attractions in moving Osberht's coinage from the end of the 840s to the 860s. It might be thought that the necessity it creates of moving the dates of his immediate predecessors and the doubt it casts on other dates as far back as 806 are arguments for not moving Osberht. Anything for a quiet life. But curiously enough it is one of the attractions of moving the date of Osberht that it allows the earlier dates to be moved. There are two pieces of evidence about Northumbria earlier in the ninth century, one documentary, the other numismatic, that do not easily fit in with the chronology presented by Roger and Simeon; and while the chronology of Roger and Simeon is accepted it is not possible to give any credible explanation of them. It so happens that moving the date of Osberht forward is exactly what is wanted to solve the problems involved. The documentary evidence which has not been mentioned above-is a passage in a chronicle compiled on the continent of Europe called the Annals of the Frankish Kingdom. It records that at the end of the year 808 King Eardwulf—who had been living at the court of Charlemagne since March that year—returned to Northumbria and recovered his throne. It does not say what happened to him thereafter, but he was evidently still alive the following year because envoys from the Pope and Emperor who had accompanied him to Northumbria in 808 brought no news about his death when they returned to the Continent in 809. The chronology given by Roger and Simeon, which has Ælfwald (806-8) immediately succeeded by Eanred (808-41), cannot accommodate a second reign for Eardwulf. A revised chronology, in which Eanred need not necessarily have come to the throne in 808 and might not have become king until 821 or even later, can accommodate both a second reign for Eardwulf and, if thought necessary, a reign for the king Æthelred whose existence was postulated because of the presence of silvery coins carrying the name Æthelred in ninth-century Northumbrian hoards.

The numismatic problem that a revised chronology resolves is one of the classic problems of Anglo-Saxon numismatics. A coin of a king Eanred formed part of a large hoard of ninth-century coins found in 1774 at Trewhiddle, near St. Austell, Cornwall.

It was a silver penny, carrying on the obverse a bust with the inscription EANRED REX and on the reverse a cross design with the inscription THES MONETA. When discussing the Trewhiddle find in Archaeologia, xcviji (1961) Mr. C. E. Blunt convincingly demonstrated that the coin involved was not struck earlier than 850—its obverse design is copied from pennies of Æthelwulf of Wessex the issue of which began only in or after 850—and he concluded that it was therefore not a coin of Eanred of Northumbria, since Eanred had died (it was assumed) in 841. This left him in rather a difficult position because no other king Eanred was known. The best that he could do was to repeat a suggestion by the nineteenth-century numismatist Edward Hawkins that the coin was struck by a 'neighbour and contemporary' of Kings Berhtwulf and Burgred of Mercia, ruling c. 850 somewhere south of the Humber, possibly in the Midlands. This is, however, hardly credible. It has become clear since Hawkins's day that in the period 850-70 there is nowhere south of the Humber where a king Eanred unknown to history could have reigned. He was not a king of East Anglia, Mercia, or Wessex, for the succession of kings in each of these kingdoms is now established; and by the 850s there were no other independent kingdoms in the area. The possibility that he was briefly king in some part of England remote from the attention of a contemporary historian, e.g. the West Midlands or Lindsey, is more or less ruled out by the evidence of charters which show that the authority of the kings of Mercia was throughout the period unchallenged in Midland England. The only way of escaping from the impasse thus created is to adopt a chronology that will allow Eanred of Northumbria to be still alive after 850. The new chronology does exactly this.

A revised chronology would allow the solution of other problems also. The dating of the archiepiscopal coinage can now be brought into line with that of the coinage of the kings. The rejection of the old chronology enables the beginning of Archbishop Wulf here's coinage to be put where it fits best numismatically—at the time of Osberht's accession, now to be dated c. 862—without worrying much about the effect on the dating of earlier archbishops. For their dating we are now bound only by the letter of Abbot Lupus, which shows that Wigmund was alive within a year or so of 850, and by the evidence of the coins which shows that Wigmund's coinage began more or less when the coppery coinage of Eanred began-five years before Eanred's death-and stopped at the end of the first reign of Æthelred. On the new chronology this will mean that he was archbishop at least between 849 and 858; there is no archiepiscopal coinage for the reign of Redwulf or for most of the second reign of Æthelred, so it remains an open question whether Wigmund, Wulfhere, or someone else was archbishop between 858 and 862. In the period before 849 the chronology of the archbishops is more uncertain, but here again the revision of the chronology helps. Two archbishops are recorded for the period between 796 and the moment Wigmund became archbishop: Eanbald and Wulfsige. For Wulfsige we have no coins. For Eanbald we have quite a number. Most of these are silvery coins with obverse legend EANBALD AREP or similar and on the reverse the moneyers' names Eadwulf or Ethelweard; they are clearly parallel to the silvery coins of Eanred and their dating will depend on his dates. But there are a few of rather better silver that carry on one side EANBALD without title and on the other side ÆTHILRED without title; the ÆTHILRED side would appear to be the obverse and this indicates, one would imagine, that they were struck in the reign of a king of that name. Under the chronology of Roger and Simeon this would mean either that they were struck for an

earlier Archbishop Eanbald under Æthelred I (790-6) or that they were struck under the Æthelred whom Roger and Simeon put after Eanred; Eanbald in the latter case would presumably be a moneyer. They suit neither position very well. By the reign of the later Æthelred the striking of silvery coins had ceased; while to put them at the end of the eighth century would divorce them from the coins of the ninth century which they resemble in style and fabric and put them alongside coins of Æthelred by the moneyer Cuthgils (certainly to be assigned to this eighth-century Æthelred) to which they bear no resemblance at all. The difficulty is neatly met by their having been struck in the reign of the king Æthelred whom on a revised chronology we can insert before Eanred. ÆTHILRED on the obverse will refer to the king, EANBALD on the reverse to the archbishop. Precisely what date this puts the coins at is not clear. The silvery coins of Æthelred found in hoards deposited in the ninth century—struck by the three moneyers Ceolbald, Cuthhard, and Tidwulf—do not appear a very homogeneous series, so their issue may be spread over a period of time. The coins in the names of Æthelred and Eanbald most resemble those of the moneyer Ceolbald; and it would be satisfying to date these in the 820s, identifying Ceolbald as the London moneyer of this name who ceases to coin for the Mercian kings after about 823.1 There are stylistic echoes of Mercian types on the coins involved and one that was at the beginning of this century in the collection of Major A. B. Creeke<sup>2</sup> carried a cross-crosslet design particularly similar to a Mercian type of the 820s struck by Ceolbald at the London mint. But this is a side issue. The important point is that the interpretation of the Æthelred/Eanbald coins is easiest on a revised chronology.

Again, a revision of the dates provides the most acceptable explanation for the problem presented by the existence of barbarous and imitative coins which die-links show were struck by the personnel of the mint of York after the issue of coins of Osberht. They do not consciously carry a king's name, so their issue is an unofficial one. On the view that Osberht's coinage stopped about 851 it is hard to account for them; for although Osberht may have lacked authority in Northumbria as a whole there is no evidence that his authority was disregarded in York and one would expect that he would have been able to control the operations of his mint. On the other hand, if the issue of the Northumbrian coinage is prolonged up to 867 they fit very well into the period after Osberht's deposition and before the utter collapse of the Northumbrian kingdom; there are no coins of Ælla and in a civil war between Osberht and Ælla an anonymous issue would be wise and its barbarous nature forced by the pressures of war.

What view will be taken of these arguments I do not know. I anticipate one particular objection. The treatment proposed for the chronology of Roger and Simeon hardly squares with the earlier conclusion that they had access to a document with 'comparatively reliable' information about Northumbria. My answer to this would be that I agree that theirs was a document with a core of correct information about Northumbria. After all, it gets the order of the kings from Eanred to Osberht right; it assigns

the Chronicle describes Ecgberht as receiving submission and peace from the Northumbrians it speaks of 'Northumbrians' and not of a king of Northumbria.

<sup>&</sup>lt;sup>1</sup> In this case Eanred's date of accession would have to be put later than 823. He might even not have become king until after the Northumbrian submission to Ecgberht of Wessex recorded in the *Anglo-Saxon Chronicle* under 829. It may be significant that when

<sup>&</sup>lt;sup>2</sup> BNJ i(1904), pl. ii, No. 40,

lengths to the two reigns of Æthelred and the reign of Redwulf that the known volume of coinage for them suggests are correct; the details it gives about the reign of Redwulf are convincing; and the passage in the Annals of the Frankish Kingdom confirms that the reign of Ælfwald ended in 808, even if it shows that he was not succeeded by Eanred. But however sound details in it may be I do not see that its broad chronological scheme is binding. There is no support in any quarter for any of the dates it gives for events after 808 and a good deal of evidence that these dates are wrong. Moreover, the document certainly leaves out a second reign for Eardwulf and probably the reign of a king Æthelred. Why it should be at the same time so right and yet so wrong it is difficult to make out; but it should not be impossible to find an explanation. One possible explanation would be this. In the course of transmission from the ninth century to the time of Simeon and Roger a section in the document covering the years immediately after 808 got lost or damaged and to fill the gap this left an enterprising scholar, hoping to tidy the chronology up, brought back the beginning of Eanred's reign from its true date to 808; and in consequence had to move back all subsequent dates to prevent Eanred's reign becoming impossibly long. In such an operation he might retain the details the document gave of the length of the reign of Æthelred and the position of the reign of Redwulf in it; but he would not be able to retain the reign length it gave for Osberht, for although the beginning of Osberht's reign might be moved back readily enough the Anglo-Saxon Chronicle and related historical works showed decisively that its end could not be moved from 867. This would account for Æthelred's reign length being correct and the reign lengths on either side being incorrect.

It is proper to conclude by considering some of the consequences of adopting the proposed chronology or a similar chronology. Redating the coins will have a considerable effect on attitudes to the coinage and economy of Northumbria in the period under discussion. Under a new chronology the salient dates in the history of the coinage will be a date probably in the 820s when the issue of a silvery coinage began; a date at the end of the 840s when the coinage was considerably debased; and a date in the 860s when the coinage came to an end. Peaks in the production of coin will be a period in the late 830s and early 840s when the bulk of Eanred's silvery coinage seems to have been struck and the period of just under ten years (849-58) from the introduction of the coppery coinage to the end of the reign of Redwulf.1 It will be necessary in the light of these and other considerations to take a fresh look at the relation of the Northumbrian coinage to contemporary coinages struck outside Northumbria. Dating it this much later will make its various phases contemporary with phases in the history of the coinage of England south of the Humber quite different from those with which its phases previously seemed contemporary; and attention will have to be given to the relation between changes in monetary policy in Northumbria and changes further south. It will also be necessary to examine in detail the significance of the penny of Eanred discussed above—which on the new chronology will have been struck shortly after the change in Northumbria from a silvery coinage to a coppery coinage—and of a celebrated gold coin which carries the name of Archbishop Wigmund (c. 849-c. 858 on a new chronology) but closely follows

coin produced fell sharply. Production rose again during the second reign of Æthelred (c. 858-c. 862) but it did not reach pre-858 levels.

<sup>&</sup>lt;sup>1</sup> For a time before the introduction of the coppery coinage and again after the death of Redwulf the number of moneyers operating and the quantity of

NORTHUMBRIAN NUMISMATIC CHRONOLOGY IN THE NINTH CENTURY 15

the type and weight of solidi struck on the European continent very early in the reign of Louis the Pious (811–40).<sup>1</sup>

Redating the kings will also have its effect. Transferring the events Simeon and Roger place in the 840s to the late 850s and early 860s will mean that the last years of Northumbrian independence before 867 will be occupied not by the long and featureless reign of a single king but by a series of short reigns ended by deposition, murder, and death. These would have undermined the strength of Northumbrian institutions and made the kingdom a target for intervention from outside. Transferring the fight at 'Ælvitheia' from 844 to the late 850s also offers fresh perspectives. It brings Vikings into contact with Northumbria not long before their decisive intervention in 867; and it is tempting to take this evidence of contact as some sort of support for finding a historical basis for the largely mythical story of Ragnar Lothbrok, the Viking chieftain whose death at the hands of a Northumbrian king some time before 867 is said to have been the immediate cause of the invasion in that year. In any case it will be necessary to think again about the motivation of the invasion of 867. If Northumbria was a kingdom with which Vikings had been recently involved and a kingdom of which they well knew the political weakness the Viking decision to invade Northumbria in force in 867 may have been a much more deliberate act of policy than has sometimes been supposed.

<sup>&</sup>lt;sup>1</sup> BMC 718 ex Pembroke sale (1848), lot 34. The coin is unique and can be traced back to the collection 1733).

## THE ANGLO-SAXON PENNIES FROM THE 'UPPER SOUTERRAIN' AT KNOWTH

#### MICHAEL DOLLEY

SINCE 1962 Dr. George Eogan, M.R.I.A., Lecturer in Archaeology at University College, Dublin, has been conducting a series of excavations at Knowth, one of three great prehistoric burial mounds that remain to this day one of the outstanding archaeological features of the Boyne Valley. Already these investigations have revealed a site of unexpected richness, and it may be said that each year has produced its own surprises. In 1969 considerable attention was given to the top of the mound, where along the eastern edge there have emerged considerable traces of a secondary settlement extending over an area at least 20 miles in length and 8 miles in width. Both on the inside and on the outside, this settlement was bounded by stone walls, but, despite the occurrence of a number of post-holes, no house or house plan has as yet been recorded. The assemblage of finds from the occupation debris, however, is one that can be paralleled at a number of ring-forts and crannogs that have been securely if rather vaguely dated to the Early Christian period. Associated with the secondary settlement was a whole complex of souterrains, four at least in number. It was in one of the passages connected with what is currectly termed the 'upper souterrain' that on 31 July 1969 the archaeologists had the good fortune to come across dating-evidence which can fairly be described as sensational.2 In a structurally intact portion of the souterrain, and imbedded in a sticky silt-like material covering the floor and in turn sealed by a subsequent 'fill' of rubble and loose clay dating from the period of the souterrain's going into disuse, there came to light a small lump of metallic oxides. Closer examination revealed two coins corroded together, with one overlapping the other for approximately twothirds of its circumference. Still on the site the two coins were carefully separated, and preliminary inspection suggested that they were Anglo-Saxon. A few days later the present writer was able to visit the excavation, and provisionally identified the coins as a silver penny of Æthelstan (924–39) and a silver penny of (?) Eadred (946–55). Very tentatively at this stage there were proposed the attributions that constitute the substance of this note, but it should be stressed that the coins, one of them broken into two pieces, were in so corroded a condition that for the moment any identifications amounted to little more than suggestions.

In October 1969 the coins were brought to the Conservation Laboratory of the Department of Archaeology at the Queen's University of Belfast, and their cleaning entrusted to the Keeper, Mr. Stephen Rees-Jones, and to his assistant, Mr. Colin Slack. The results of the cleaning will be self-evident from the accompanying enlarged photographs, and are a tribute at once to the skill, resources, and above all patience of the staff of the laboratory. In both cases the legends can now be read in their entirety with complete confidence, and it can also be said with reasonable certainty that neither coin evidences

any significant degree of wear. A detailed description and a discussion of the coins follow 1

#### COIN A

Obv. +ÆDELSTAN REX TOOBRIT within two circles: small cross in centre: small wedge-shaped stop before BRIT. Die-axis 270°. Weight 1.48 g. (22.9 grains). The coin has been broken into two pieces, but any loss seems minimal.

Rev. +ÆDELM MO VVIN'CIVI-T within two circles: small cross in centre: four small pellets disposed at regular intervals in the field just inside the inner circle: a pellet stop before CIVI-T.

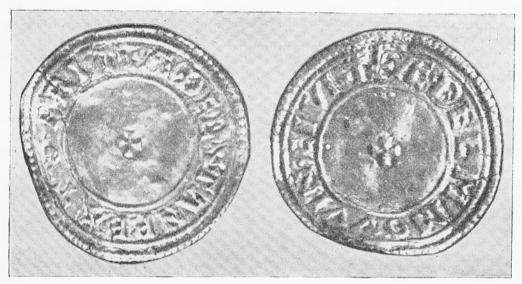


Fig. 1 (c.  $2\frac{1}{2} \times$ ).

This circumscription small cross coin (North 672 = Brooke 5 = BMC v, etc.) is exceptionally important. It is of the Winchester mint, and by the known Winchester monever Æthelm (? = Æthelhelm with haplological reduction, cf. O. von Feiltizen, The Pre-Conquest Personal Names of Domesday Book (Uppsala, 1937), p. 79). The type itself is a common one where Æthelstan's coinage is concerned, but, though known of four Winchester moneyers, has not been recorded hitherto of Æthelm. This moneyer did, however, strike coins of the portrait type with the crowned bust breaking the legend (North 673 = Brooke 4 = BMC viii, etc.), a type which probably followed that under discussion. Of this portrait type by the moneyer Æthelm at least four specimens are recorded, one in the British Museum (BMAcq 535), two in the Museo Nazionale at Rome (ex 1883 Forum hoard, cf. NC 1884, p. 247, no. 269), and one which went through the second Drabble sale (Glendining, 13 and 14: xii: 1943, lot 851 but not illustrated). On three of these coins the mint name reads vvinci or vvinei, normal forms of the Winchester mint-signature in this type, but on the fourth (one of those in Rome from the Forum hoard) the reading is identical with that which appears on the circumscription coin from the excavation at Knowth.

C 7473

<sup>1</sup> I am indebted to Mr. Blunt for giving the information on the Æthelstan coin. C

The reverses of *BMC* types v and viii are very similar, and this makes it unusually difficult for the student to identify mules between the two. Where the London mint is concerned, a few mules had already been established with fair confidence, the criterion being the form of the mint-signature which differs significantly between the two issues. At Winchester, on the other hand, the material is much less extensive, but in the *portrait* type there had already been noted the CIVI-T form as anomalous, and the suggestion had been hazarded that the coin was a mule, although with the essential reservation that a 'true' coin of the *circumscription* type had still to be found.<sup>1</sup>

A comparison of the Knowth and Forum coins on the basis of photographs establishes with complete certainty that both pieces were struck from the same reverse die. Dr. Eogan's discovery thus provides the missing evidence, and for the first time we are enabled to identify with confidence the coin from the Forum hoard as a mule between the *portrait* and *circumscription* issues. The dating of the Knowth coin, however, is something best deferred until later in this note.

#### COIN B

Obv. +EADREDRE within two circles: small cross in centre: second 'R' of legend of distorted form: heavy rusting of die between 4 and 5 o'clock. Die-axis 90°. Weight 1·465 g. (22·6 grains).

Rev. rosette /DVRA/O+O/NMO<sup>-</sup>/ rosette, in five lines across field: inner plain and beaded outer circle.



Fig. 2 (c.  $2\frac{1}{2} \times$ ).

This two-line coin (North 708 = Brooke 1 = BMC i, etc.) is from the same pair of dies as two coins in the Royal Coin Cabinet at Copenhagen (SCBI Copenhagen I, 737 and 737a—both nineteenth-century purchases) and a coin in the National Museum of Antiquities of Scotland (SCBI Edinburgh 289—from the Iona hoard). It is likely, too, that the Knowth coin is not the first, from the reverse die at least, to have been found in

<sup>&</sup>lt;sup>1</sup> In a study of the coinage of this reign by Mr. Blunt, a summary of which was read before this society but which is as yet unpublished.

Ireland; a comparable piece was in the cabinet of the Dublin numismatist James Simon at least as early as 1754 (cf. National Library of Ireland MS. 301, p. 6, no. 28). The inclusion of the two rosettes in the reverse type suggests that it was struck in northwestern England, and a mint in or near the Welsh march might have seemed further indicated by the name of the moneyer appearing to have a seemingly Celtic suffix—an were it not for the fact that beside the consistent spelling DVRAN on rosette coins with the Chester mint-signature of the three-line type of Eadgar (North 757 = Brooke 1 var. = BMC ii)—we may instance SCBI Chester 82 and Edinburgh 627—there exists BMC 49 of Eadmund where north-western rosettes are accompanied by the inflected form DVRAND(ES) which itself is suggestive at this date of striking somewhere in the general area of Chester. There can be little doubt, then, that DVRAN is a variant of Durand, a well-attested OG personal name, even though the individual responsible for the rosette coins cannot well be the same as the moneyer signing himself consistently DVRAND who was prolific in the north-east of England under Eadgar. The products of this second (? York) moneyer include BMC 84, 168, 169; SCBI Edinburgh 388–90; SCBI Glasgow 682; SCBI Oxford 388, etc., not to go beyond the more obvious works of reference, while a measure of the scale of his activity is the fact that there were 15 of his two-line (North 741 = Brooke 1 = BMC i) pence in the 1945 Tetney hoard from Lincolnshire, and 3 at least of the small cross *circumscription* (North 748 = Brooke 4 = BMC iii) coins in the 1894 hoard from near Douglas on the Isle of Man. It is possible, too, that the Chester Duran(d) struck this type also at Tamworth (cf. Wheeler, 12–14: iii: 1930, lot 35), but more work will have to be done on the apparent overlap of this type with a small cross and its much scarcer rosette analogue (North 758 and 759 = Brooke 4 (var. not distinguished) = BMC iv) and also on the forms of the Tamworth mintsignature before there can be anything like certainty on this point.

#### DATE OF LOSS

The two coins were found corroded together, and were the only coins to be discovered in the gallery in question. The most natural inference is that they were lost on the same occasion, and this near-certainty is only heightened by the circumstance that the second coin was struck well within the normal life-cycle of the first. Even in England itself, though the evidence is scanty, there does not seem to have been any formal demonetization of the coins of Æthelstan until very late in the reign of Eadgar, while from the Irish Sea area there are hoards in plenty concealed as late as the 970s in which are present one or more of his coins.

It is perfectly acceptable, then, that coins of Æthelstan and Eadred should have been in the possession of one and the same individual in the Boyne Valley about the middle of the tenth century, and the absence of coins of Eadwig (955–9) and of Eadgar (959–75) may seem an argument that loss did not occur all that much later. Even Eadwig coins are not all that uncommon in Irish finds, while in Ireland pennies of Eadgar are easily the most frequently met with among English coins from the whole of the Viking period. If, therefore, two English silver pennies had been lost at Knowth at a date much subsequent to the 950s it may be thought very unlikely that neither would have been a coin of these two reigns. In this connection there cannot be ignored the circumstance that neither of the Knowth coins appears to evidence any significant degree of wear, and it

is clearly desirable to postulate loss at a date not too far removed from that of the striking of the older. The fact that the Æthelstan coin is of circumscription type with the REX TOtius BRITanniæ formula appearing in the legend must suggest that it was not struck before 927, while the fact that it is not of portrait type but of the Winchester mint could suggest a date before rather than after c. 935. Nor is this the end of the story. That no other pennies of this type are known for this moneyer may not be significant, but the fact that the reverse die survived to be used with a portrait obverse die does suggest that we are dealing with a coin struck not all that long before the introduction of the portrait type. In other words it is reasonable to suppose that the Æthelstan penny was struck c. 935 or a very little earlier. There seems, too, no reason why the Eadred penny should not have been struck in the early part of the reign, i.e. before rather than after c. 950, and so the Æthelstan coin need not have been much more than a dozen years old before the two coins came together. On this telling we are probably justified in suggesting for the date of loss of the two coins from Knowth a date c. 950 or a very little later. It is a dating which I believe is sufficiently close to be acceptable to the archaeologist who has to conclude that the primary silting of the upper souterrain at Knowth occurred about the middle of the tenth century. In other words, the remodelling of the Knowth burial complex as an artificial hill-fort seems now to ante-date the Anglo-Norman conquest of Meath by more than two centuries.

In conclusion one would stress that finds of Anglo-Saxon coins from the first half of the tenth century are not unprecedented where the area of Knowth is concerned. Perhaps the most immediately relevant is a c. 1871 discovery, at Fennor<sup>1</sup> only a couple of miles to the west, of a coin of Æthelstan and of one of Eadmund (939–46). Unfortunately the coins can no longer be identified in the Academy's cabinet now housed in the National Museum of Ireland. Mention should also be made of two pennies of Edward the Elder found in the early part of this century on the demesne lands of Castle Bellingham some fifteen miles to the north.<sup>2</sup> From Drogheda, too, some five miles to the east, there is the record of a penny of Æthelstan, now in the Ulster Museum, by the London moneyer Beahred.3 If we extend our net to take in the three contiguous counties of Louth, Meath, and Co. Dublin, it is to find a total of no fewer than six coin hoards which we may suppose to have been concealed in the first half of the tenth century. Earliest but very shadowy is what was rumoured to be an immense hoard of Kufic dirhams with a few Anglo-Saxon pence that is supposed to have been unearthed near Drogheda in 1846 but only four coins from which seem ever to have been seen by a competent numismatist.4 Three years before this, however, there had been discovered a score or so of coins of Edward the Elder with the odd English Viking and Kufic coin at Lugga, near Nobber in Co. Meath.<sup>5</sup> The find is now preserved in the National Museum of Ireland. In 1838 a similar but slightly later find came to light at Glasnevin in Co. Dublin.<sup>6</sup> The coins have been dispersed, but most of the hoard can be reconstructed with a fair degree of confidence. In 1883 a slightly larger hoard dating from late in the reign of Æthelstan was found at an unknown place in Co. Dublin, and fortunately before its dispersal was listed by the highly competent Aquilla Smith. Finally there was a major

<sup>&</sup>lt;sup>1</sup> PRIA<sup>2</sup> i (1879), pp. 19 and 20.

<sup>&</sup>lt;sup>2</sup> Co. Louth Arch. Journ. i (1907), p. 104.

<sup>&</sup>lt;sup>3</sup> Ulster Journ Arch. i (1853), p. 164.

<sup>4</sup> JBAA iii (1848), p. 334.

<sup>&</sup>lt;sup>5</sup> NC 1863, pp. 255-7.

<sup>&</sup>lt;sup>6</sup> SCBI B.M. H/N (1966), p. 28 correcting Lindsay's 'Claremont' on strength of MS. catalogue of the Dawson cabinet in Royal Irish Academy.

<sup>7</sup> NC 1883, pp. 282-7.

hoard ending with coins of Eadred and perhaps concealed a year or two before that king's death which came to light in 1746 at Monasterboice only a few miles north-east of Knowth.¹ On the basis of such evidence we can be reasonably certain that a quantity of Anglo-Saxon silver coin was in the possession of the Vikings of Brega and Dublin about the middle of the tenth century, and so this little find of two Anglo-Saxon coins at Knowth occasions no surprise. It is the stratified archaeological context and not the find-spot that is sensational.

<sup>1</sup> NC 1957, pp. 195 and 196. Were one prepared to include finds from the three counties concealed as late as c. 980, the following additions would have to be made Dalkey 1838 (JRSAI xci (1961), pp. 1-18), 'Co. Meath' (SCBI B.M. H/N, p. 32), Killincoole 1859

(*JRSAI* viii (1864–6), pp. 373–6), Killyon Manor 1876 (*BNJ* xxxi (1962), pp. 23–5), Oldcastle 1900 (ibid. xxxx, ii (1959), pp. 253 and 254), and Smarmore 1929 (ibid. xxvII, ii (1953), pp. 161–6).

#### THE STAFFORD (1800) AND OULTON (1795) HOARDS

#### P. H. ROBINSON

#### STAFFORD (1800)

THE original report of this find appeared in the Staffordshire Advertiser of 13 December 1800:

A short time ago between two and three hundred pieces of ancient silver coin were discovered in Mr. Kingstone's tanyard¹ in this town, about a yard from the surface of the ground. They were contained in a small jug and are in an excellent state of preservation. It is supposed they have lain there about 700 years as they appear to have been coined during the reigns of Ethelred, Canute and Hardicute which last monarch died (it is said through excessive eating and drinking) at Lambeth in the year 1041.

This report was later quoted, with a few minor alterations, firstly in the Gentleman's Magazine<sup>2</sup> and then by the Revd. Stebbing Shaw in the second volume of his History and Antiquities of Staffordshire.<sup>3</sup> The former is the source for a reference to the find by Lindsay,<sup>4</sup> which in turn was the source for the more recent Inventory reference to it, in which it is no. 338. In Mr. Michael Dolley's listing of Viking Age coin hoards from Great Britain and Ireland, the find is no. 158.<sup>5</sup>

Since no details are given of the source of the *Advertiser*'s information, the report should be treated with some caution. The lack of reference to any coins of Harold I is to be commented on. This might mean that the report should be regarded as a defective source but if, for example, some or all of the coins of Harthacnut were of the 'jewel-cross' type, then it is possible that 'jewel-cross' pennies in the name of Harold I were present but not identified and so were casually grouped with those of Harthacnut.

In the William Salt Library at Stafford, among the papers of Stebbing Shaw, is a letter dated 23 January 1802 from Thomas Sharp, the Coventry antiquarian, collector, and author. The postscript of this reads:

As you do not if I remember right collect coins, I shall be very glad to purchase any that you may have remaining of the Stephens—the Stone discovery of Confessors and Conquerers [sic] or Stafford Canutes.

Sharp's assumption that Shaw had not collected coins was incorrect for in the final two decades of the preceding century Shaw made frequent purchases at London auctions. 'The Stephens' refers to the single coin acquired by Shaw from the Ashby de la Zouch find of 1789 while 'the Stone discovery' is that made at Oulton near Stone in 1795, examined below. 'The Stafford Canutes' may only be a reference to the Stafford find of 1800.

The Oulton find included, as far as may be seen, only a small proportion of coins of William I. That Sharp nevertheless mentioned them would suggest that, in spite of the

<sup>&</sup>lt;sup>1</sup> Kingstone's Tanyard lay in Eastgate Street, Stafford, a short distance from the East Gate.

<sup>&</sup>lt;sup>2</sup> GM 1800, ii, p. 1276.

<sup>&</sup>lt;sup>a</sup> History and Antiquities of Staffordshire, ii, part 1 (1801), p. 2 of the Additions and Corrections to the

General History &c in Volume 1.

<sup>&</sup>lt;sup>4</sup> A View of the Coinage of the Heptarchy (1842), . 121.

<sup>&</sup>lt;sup>5</sup> SCBI The Hiberno-Norse Coins in the British Museum (1966), pp. 41 and 52.

report in the *Advertiser*, the Stafford find contained only coins of Cnut. However, as this is only a casually written postscript to a letter, it may not be assumed that Sharp is consistent here. The Wedmore hoard (*Inventory* 374) has shown that a hoard deposited as late as c. 1043 could consist mainly of coins of Cnut and include the odd coin of Æthelred II. The newspaper report cannot therefore be discredited as yet.

Nevertheless there is here the first evidence regarding the dispersal of the hoard. Shaw almost certainly sold his coins to Sharp for by this time he was in severe financial difficulties due to chronic illness and the cost of convalescing by the sea and to the costs incurred with his book. Sharp's collection of coins was purchased by the Revd. William Woolston, whose collection of English coins was sold after his death in 1817 to Matthew Young. Young presumably incorporated Woolston's coins in his general stock and disposed of them piecemeal. Sharp did, however, allow certain of his coins struck at Shrewsbury to be illustrated and described in Owen and Blakeway's *History of Shrewsbury*. The coins fall into two groups, the first consisting of three quatrefoil-type pennies of Cnut by the moneyers Brungar, Ælfhelm, and Crinan. Although the illustrations are not always accurate, the coins may be read with little difficulty.

- 9. Obv. + ENVTREXXNGLΘRVM Rev. + BR VHG XRΘ NSE BMC—cf. Lockett 3754 (not illustrated but a cast is in the B.M.).
- 10. Obv.  $+ ENVTREXXNGL \odot R$  Rev. + EL FEL MON SEOB BMC—.
- 11. Obv. +CNVTRE[X]ANGL⊙ Rev. +CRI NXN ONZC R⊙B BMC—but cf. Hildebrand (1881) 3124 which is from a different obverse die while BMC 502 appears to combine the obverse die with a different reverse die.

The second group is one of five coins struck in the latter part of the reign of Edward the Confessor. These are discussed below in the section on the Oulton find. Coins struck at Shrewsbury should be well represented in both the Stafford and the Oulton finds while, turning to the first group, 'quatrefoil' type pennies of Shrewsbury are by no means common, so that a group of even only three in this collection would suggest that Sharp had had access to a hoard containing coins of this type found in the west of England or the Midlands. It is quite possible, therefore, that these were some of the coins purchased by Sharp from Shaw, although the possibility that Sharp may have obtained the coins from another find, such as that from Kingsholm, a suburb of Gloucester, in c. 1780³ cannot be discounted. One cannot conclude too much from the fact that the three coins are of one type only, for by coincidence this type may have been better represented among the coins struck at Shrewsbury in the find than the other issues of Cnut. In the present state of our knowledge, the find may be summarized as follows:

STAFFORD, Eastgate Street. Autumn 1800. Deposit: unknown date between c. 1016 and c. 1040.

Between 200 and 300 R pennies of Cnut. An almost contemporary newspaper report refers also to coins of Æthelred II and Harthacnut but not of Harold I: this report may neither be confirmed nor absolutely rejected. No individual coins are identified for certain but three Cnut pennies of BMC type viii struck at Shrewsbury in the collection of Thomas Sharp may be from this find. Found in a 'small jug'.

<sup>&</sup>lt;sup>1</sup> Ruding, *Annals* (1819), v, p. 306 note m = 1840 edn., p. 381 n. 8.

<sup>&</sup>lt;sup>2</sup> E. Hawkins, *English Silver Coins* (1841), p. 102 = 3rd edn. (1887), p. 213.

<sup>&</sup>lt;sup>3</sup> M. Dolley and D. M. Metcalf, 'Cnut's Quatrefoil type in English Cabinets of the Eighteenth Century', BNJ xxix (1958), pp. 69-81.

Disposition. Some or all of the coins were acquired by the Revd. Stebbing Shaw, who probably sold them in 1802 to Thomas Sharp.

P. H. Robinson, BNJ xxxviii (1969), pp. 22-24: M. Dolley, SCBI B.M. H/N, pp. 41 and 52 (No. 158): Inventory 338: Lindsay (H), p. 121: S. Shaw, History and Antiquities of Staffordshire, ii, part 1 (1801), p. 2 of the Additions and Corrections to the General History &c in Volume I: GM 1800, ii, p. 1276: Staffordshire Advertiser, 13 December 1800.

#### OULTON (NEAR STONE), STAFFS. (1795)

The first report of a discovery of coins at Oulton appeared in the Staffordshire Advertiser of 7 March 1795:

Extract of a letter from Stone, March 3rd.

'As the gardener of Mr. Shelley of Oulton, near this place, was digging in his master's orchard, he found a gold ring, and upwards of a thousand small pieces of silver coin, most of which were perfect; and on examination proved to be the coin of St. Edward the Confessor, one of our Saxon kings, who reigned upwards of 700 years ago.—It could not be discovered in what they had been kept, as the covering, whatever it might have been, had mouldered into dust.'

A second report appeared two days later in Aris's Birmingham Gazette:

On Saturday last as a poor labouring man was digging in an orchard at Otton [sic] near Stone, in Staffordshire, he discovered a quantity of silver coin and a number of gold rings and bracelets; which from the dates on the former appear to have been buried during the Revolution, in the time of Charles I.—As soon as it was known, a number of people assembled to pursue the search for this hidden treasure, and could not be dispersed till a party of the Glasgow Rangers, who happened to be stationed at Stone, were called out to protect the premises, and under a promise of a division of the spoil; but they unfortunately arrived too late to receive any benefit from it, the greater part being carried off by the populace.

These reports were not noticed by Stebbing Shaw who published in the following year in the *Gentleman's Magazine* a brief account of coin hoards in Staffordshire which he had noted while preparing his history of the county. On the Oulton find he wrote:

In 1795 was likewise found at Oulton near Stone, a parcel of 4000 silver coins, all Saxon, except some of William the Conqueror; 40 of which of the different sorts are in my possession; and, with the above, and other much more remarkable curiosities since discovered in this county, will greatly embellish the General History of my First Volume, now very forward in the press.

In the draft of this letter which is preserved among Shaw's papers in the William Salt Library, Shaw had originally written:

In Feby 1795 was likewise found at Oulton near Stone one parcel about 4000 silver coins mostly Saxon and of Wm Conqueror—40 of which are in my possession in the highest preservation but were now sold about the county and the north.

It is likely that Shaw's information about the find came from whoever sold him the coins, possibly one of the people mentioned in the *Gazette* account.

In spite of the final statement in the GM letter no mention was made of the find in the first volume of Shaw's The History and Antiquities of Staffordshire which appeared in 1798. The following year, while he was collecting material for the second volume, Shaw

received a letter dated 19 February from John Dent, a solicitor in Stone. Part of this letter, which is also preserved in the William Salt Library, reads:

A few years ago, I think in the year 1795, there was found in Mr. Shelley's garden a large quantity of Saxon coins. There were 10 different sorts, and Mrs. Shelley has a good many of them now; there was also found a Gold Ring, quite whole and a lump of pure gold, which Mrs. Shelley has also... If you should come into this neighbourhood Mr. and Mrs. Shelley will be very glad to see you and you will then have an opportunity of seeing the coins which are very curious and well worth seeing.

The final sentence shows that Shaw's information about the find had been second-hand: the draft of his *GM* letter demonstrates that he had believed that the coins had been dispersed shortly after the discovery and it is presumably for this reason that he had not followed it up further. In his reference to the hoard in the next volume of his history, which appeared in 1801, Shaw appears to have been more cautious for he merely stated:

To our former account, p. 37 &c we should have added the large collection of Saxon coins found at Oulton, near Stone, as will be there more fully noticed.

Shaw died, however, the following year without writing anything further on the find.<sup>2</sup> If the Staffordshire antiquaries who succeeded him noted the hoard, they merely copied what he had written. The exception is the local historian and popular writer F. Hackwood who wrote about it on two occasions<sup>3</sup> and who used the original *Advertiser* report of the discovery as well. Hackwood adds a detail that the coins were 'enclosed in a coarse clay vessel' which may be considered almost certainly incorrect as it conflicts with the *Advertiser* account. This detail may have been transferred from the account of the Stafford find, which was found in 'a small jug' and the newspaper report of which was known to Hackwood. The hoard passed otherwise unnoticed until the present decade when Mrs. J. S. Martin noted it and Mr. Michael Dolley proposed it as the source of a group of Edward the Confessor pennies of type *BMC* xv.<sup>4</sup> The hoard is no. 185 in his listing of Viking Age coin hoards from Great Britain and Ireland.<sup>5</sup>

The contradictions in the various accounts of the discovery may briefly be commented on. The total given in the *Advertiser* of 1,000 coins found is to be preferred to Shaw's figure of 4,000, as the former appears to be the better source. However, if the free-for-all that is described in the *Gazette* did indeed occur, then it is difficult to see how the number of coins could have been assessed. Both figures are apparently then rough estimates and possibly neither may approach anywhere near the truth. Shaw's statement that the find included coins of William I is correct as it is confirmed in the postscript of the letter to him from Thomas Sharp, quoted earlier in this note, and by other evidence discussed below. These were clearly in a distinct minority to the Anglo-Saxon coins.

Objects of gold occur in only five of the seventy-three eleventh-century hoards found in the British Isles. Five gold finger-rings are recorded from the Sutton, Isle of Ely, find (*Inventory* 346) and two from the Soberton, Hants, find (*Inventory* 334). It would be quite feasible for 'a number of gold rings' to have been found at Oulton as stated in the *Gazette* account. Since, however, two of the other reports of the Oulton discovery refer

<sup>1</sup> See n. 3 p. 22, supra.

<sup>&</sup>lt;sup>2</sup> Parts of the proof copy of volume ii, part 2 of Shaw's *History* have recently come to light so it is not beyond the realms of possibility that one day more of Shaw's information on this and other Staffordshire finds will be known.

<sup>&</sup>lt;sup>a</sup> Staffordshire Sketches (1916), p. 42; Glimpses of Bygone Staffordshire (1925), p. 19.

<sup>4 &#</sup>x27;Stafford, Stamford or Steyning ?', SNC 1962, pp. 106 and 107.

<sup>&</sup>lt;sup>5</sup> SCBI The Hiberno-Norse Coins in the British Museum (1966), pp. 44 and 53,

to one ring only, it seems more likely that only one was indeed found. The reference to gold 'bracelets' in the *Gazette* account could be taken as an allusion to armlets, necklets, or even penannular brooches. Although silver or silver gilt items of this sort are known from a very small number of coin hoards deposited in the eleventh century, there are only two hoards of this date known to the author to have included any items of gold jewellery—the London, St. Mary Hill Church, find (*Inventory* 250) with a gold filigree brooch and the Halton Moor find (*Inventory* 181) with two gold bracteates. The occurrence of a number of gold 'bracelets' in the Oulton find is, therefore, highly unlikely. What is probable is that this is an exaggerated reference to the 'lump of pure gold' mentioned in the letter to Stebbing Shaw from John Dent. This was possibly a small ingot and if it did give rise to the story of gold 'bracelets', may have been in the form of a curved bar. It is most unfortunate that no further information about this item was given for no other eleventh-century coin hoard is known to have included such an item. Another possibility is that the object was a fragment of an armlet, necklet, or penannular brooch.

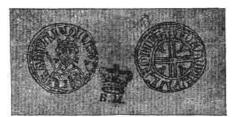


Fig. 1.

Of the forty coins acquired by Shaw, perhaps all Anglo-Saxon, only one may be identified with certainty. In 1797 he exhibited two coins before members of the Society of Antiquaries, whose minutes for 4 May include the statement:

The Revd. Stebbing Shaw exhibited to the Society two unpublished English coins: one of Edward the Confessor found at Oulton in Staffordshire, the other of Stephen found at Ashby Woulds in Leicestershire, the types of which were heretofore unknown.

Ruding was present at the meeting. Among his manuscript notes now in the Department of Manuscripts at the British Museum are drawings of two coins stated to belong to Shaw. One is his well-known penny of Stephen from the Ashby de la Zouch (Ashby Woulds) find; the other, llustrated above, is a *BMC* type xiv penny of Edward the Confessor minted at Worcester by Heathewulf and is without doubt the coin from Oulton. Ruding's note to the coin reads 'cccxxvii Revd. S. Shaw. Mr. (i.e. Taylor) Combe reads it LI for Lincoln' and he has added in pencil on his drawing just above the mint signature the letters LI upside down. The coin did not find a place in his *Annals*. It will presumably have been sold to Thomas Sharp with the rest of Shaw's coins, passing subsequently into William Woolston's collection and later into the stock of Matthew Young. In Mr. F. Elmore Jones's list of examples in his study of this type, this is the

the Library of the British Numismatic Society. It is described as belonging to Shaw and the reverse inscription is given as HEATHEWVLF ON IT as Ruding had written.

<sup>&</sup>lt;sup>1</sup> Additional MSS. 18095, pp. 55<sup>v</sup> and 56<sup>r</sup>.

<sup>&</sup>lt;sup>2</sup> Additional MSS. 18094, pp. 82<sup>v</sup> and 83<sup>r</sup>.

<sup>&</sup>lt;sup>3</sup> The coin is included on p. 25 of the Index of Moneyers in the Taylor Combe Manuscript entitled Engravings of British and Anglo Saxon Coins now in

eighth coin. It was lot 866 in the V. J. E. Ryan sale and had a pedigree going back to the collection of the Revd. J. W. Martin, sold in 1859.

Thomas Sharp's collection also included a small group of five pennies of Edward the Confessor struck at Shrewsbury.<sup>2</sup> As has been suggested above, these may have been some of the coins which he purchased from Shaw and which came from the Oulton find. Although this is not absolutely certain, they are briefly noted here in case future evidence should confirm this possibility. The coins are:

BMC type vii

20. Obv. +EDPER' DREI' Rev. +GODESBRONDONSER

Godesbrand. This would appear to be the specimen in the Lockett collection (lot 3809) (not illustrated) ex Carlyon Britton collection (lot 608) and now in the British Museum (B.M. 1960/5/1/40).

BMC type ix

21. Obv. EXDPXRDRE+ΛИGL\* Rev. +LEOFSTΛИΟИSERO Leofstan. cf. BMC 1181 (ex City of London (1872) find).

BMC type xv

 Obv. EADPARDREX Rev. +GODPINEONSROBB Godwine. cf. SCBI Oxford i, 1076 and idem Reading 178.

17. Obv. EADPARDREX Rev. +PVLMIERONSROI

Wulfmaer. An example from the same dies is in the collection of Shrewsbury Borough Museum and Art Gallery without provenance.

18. Obv. EDPARDREXAI Rev. +EARNPI⊙NSR⊙P

Earnwi. An example from the same dies is also in the collection of Shrewsbury Borough Museum and Art Gallery without provenance. Cf. also BMC 1187 from a different obverse die.

A small group of four coins, all struck at Stafford, are described in a chapter entitled A Brief Historical Account of the Coinage of Staffordshire in the second section of William Pitt's A Topographical History of Staffordshire, published in 1817. The author of this chapter does not give his name but the initials W. W. given in a footnote on page 2 betray him as the Revd. William Woolston who was also a subscriber to the book. The four³ coins were acquired on at least two occasions and no information is given of their provenances. There is no doubt, however, that all are from Oulton. As with Shaw's forty coins, all are 'in the highest state of preservation'. The second and third coins, described on page 2, are William I type Br. II pennies by the moneyers Godwine and Wulfnoth. The first of these is as BMC 140. An example of the second coin, the legends of which are given as obv. PILLEMV REX I rev. PYLFNOD ON STÆF is not in the national collection although a specimen was known to Brooke in York Museum. The mint signature is in fact STÆFF. The fourth coin, described in a footnote on the following page, is an Edward the Confessor penny of type BMC xv, struck by Godwine and from the same dies as BMC 1218.

<sup>2</sup> Owen and Blakeway, *History of Shrewsbury* (1825), plate facing p. 24.

<sup>3</sup> Woolston also refers to a further coin of William I 'struck at Stafford, with a reverse considerably different from those' of his own four coins, in the Tyssen collection, which he had, however, never seen, and so could not describe further. Two Stafford minted pennies of William I are listed in the sale catalogue of the Tyssen collection: lot 889, which is a type Br. II penny and lot 875, a type Br. VI penny. The latter coin is not known today and is certainly a coin from another mint misascribed. Presumably it is the coin referred to by Woolston.

<sup>&</sup>lt;sup>1</sup> 'An Unpublished Penny of Edward the Confessor', SNC Apr. 1957, p. 157-60.

The most interesting of the coins is the first, which may be identified from the description given as a 'mule' combining the first two types of William I. Woolston gives the legends as *obv*. PILLEMVS REX A *rev*. GODPINNE ON STEF. The form of the moneyer's name indicates that the coin is the I/II 'mule' known to Brooke from a specimen in the Fitz-william Museum and ascribed by him to Salisbury. The legends read:

Obv. +PILLEMVSREXN

Rev. +GODPINNEONSI/EI



FIG. 2.

The coin is believed to have been purchased from the dealer Lincoln in 1871 but nothing further is known of its provenance. A second example, also ascribed to Salisbury, formed lot 873 in the sale of the V. J. E. Ryan collection and is now in the collection of Commander Mack. As the specimen in the Fitzwilliam Museum is fragmentary it is quite likely that the Ryan coin is the specimen which was in the Woolston collection.

There is no doubt that the 'mule' should be ascribed to Stafford as Woolston proposed although why he transcribed SIÆI as STEF rather than STÆF or STÆF will never be known. Mr. Elmore Jones has demonstrated that the coin has an obverse die link with the William I type Br. I penny of Godwine at Stafford, lot 2840 in the Lockett collection<sup>2</sup> and now in the British Museum and, as this die-link has not been fully published, it is not out of place to illustrate above both coins.

<sup>&</sup>lt;sup>1</sup> BMC Norman Kings ccxxiv.

<sup>&</sup>lt;sup>2</sup> Michael Dolley, 'Stafford, Stamford or Steyning?', SNC 1962, p. 107.

Five pennies of Edward the Confessor (three of them incidentally struck at Shrewsbury) and stated to have come from the Oulton find formed part of a collection of coins sold by Captain Ralph Tichbourne Hinckes at Sotheby's on 21 November 1921, lot 329. The five coins are, following the details given in the catalogue:

BMC xi Shrewsbury, Godwine. Rev. Godpine on Sero (cf. BMC 1182).

Shrewsbury, Wudeman. Rev. Pudeman on Seob (cf. BMC 1184).

BMC xv Shrewsbury. Godwine. Rev. GODPINE ON SROBR (BMC—but cf. SCBI Oxford I 1076 and idem Reading 178 which end SROBB).

,, Chester. Huscarl. Rev. Husralr on Lece (cf. BMC 663).

" Stafford. Godwine. Rev. GODPINE ON STÆ (cf. BMC 1218).

I am grateful to Mr. H. E. Pagan for this reference. He suggests that the collection was formed in the nineteenth century as it contains no coins which date after 1870. It is possible that the five coins were acquired originally by an earlier member of Hinckes's family, Peter Tichbourne Hinckes of Tettenhall in Staffordshire, who was a friend of Stebbing Shaw and a minor antiquary although not known to have collected coins.<sup>2</sup>

The identification of two examples of the Edward the Confessor penny of BMC type xv and with the reverse legend GODPINE ON STÆ (= BMC 1218) as from the find at Oulton settles the attribution of these coins to Stafford if they were present in such quantities in the hoard.3 It may be postulated further that the majority of the somewhat rarer William I pennies of types I and II struck at Stafford, which appear in cabinets only in the years after 1800,4 also come from Oulton. The absence today of any coins struck at Stafford during the reign of Harold II, which one would have expected to be represented in the find, would suggest that, in fact, none may have been struck. However, the apparent paucity of coins of William I in the find as opposed to those of Edward the Confessor suggests that the hoard may have been composed of two main elements—a bullion reserve of out-of-date coin and a small parcel of current coins added to these at about the time of concealment. The hoard could then be tentatively seen as part of the bullion reserve of the Stafford mint (as Mr. Pagan has suggested in a letter to me), while the smaller parcel might have consisted mainly of newly struck coins of William I type II. Another small element perhaps consisted of miscellaneous current coins received by the mint officials in the course of their duties and again added to the others at about the time of concealment. This reconstruction would explain why so many more coins of William I type II struck at Stafford have survived today than of type I, while the chances that any hypothetical Stafford pennics of Harold II should survive may be seen to be slender. The absence today then of Stafford pennies of Harold II may be fortuitous.

the sale catalogue of the Tyssen collection), 1810 (the date of the B.M. acquisition of BMC 140 from B. C. Roberts) and 1817 (William Woolston collection—see above): the first reference to a Br. II penny by Wulfnoth is also in this collection. Two otherwise unidentified Br. II Stafford pennies were in lot 21 in the sale of the coins of an 'Eminent Collector' (H. R. Willett) at Sothebys on 23 Feb. 1824. It may be noted, however, that the Jubbergate, York, find of 1845 may be the source of the Br. II penny of Wulfnoth at Stafford, now in York Museum and referred to by Brooke (Norman Kings, t. ccxxxviii).

<sup>&</sup>lt;sup>1</sup> In the catalogue the date for the discovery is given as 1794.

<sup>2</sup> Shaw, History and Antiquities of Staffordshire, ii, part 1, advertisement p. 30.

<sup>&</sup>lt;sup>3</sup> Michael Dolley, 'Stafford, Stamford or Steyning?', SNC 1962, pp. 106 f. One coin from the same dies as BMC 1218 is in the National Museum, Copenhagen, and is believed to be from a Scandinavian find.

<sup>&</sup>lt;sup>4</sup> The first record of a William I type Br. I penny of Godwine at Stafford is in 1819 (lot 183 in the sale of John Thane's collection at Sotheby's, 19 Apr. 1819). Br. II pennies of Godwine appear in 1802 (lot 889 in

For Inventory purposes, the find may be summarized as follows:

OULTON (near Stone), Staffs. February 1795. Deposit: c. 1069-70.

Over 1,000 (another figure given is 4,000, but it is possible that neither is at all accurate) R pennies, said to be of ten different types, which may or may not include 'mules', the majority of Edward the Confessor but a few of William I, with a gold ring and a small gold ingot (?). There was no trace of a container. Few coins identified for certain: Edward the Confessor BMC xi—Shrewsbury: Godwine and Wudeman. BMC xiv—Worcester: Heathewulf. BMC xv—Chester: Huscarl. Shrewsbury: Godwine. Stafford: Godwine (2). William I Br. I/II—Stafford: Godwine. Br. II—Stafford: Godwine and Wulfnoth. The find is also probably the source of an uncertain number of Edward the Confessor type BMC xv and William I types Br. I and II pennies struck at Stafford and may be the source of a group of five pennies of Edward the Confessor at one time in the collection of Thomas Sharp: these are all struck in Shrewsbury: BMC vii—Godesbrand. BMC ix—Leofstan. BMC xv—Godwine, Wulfmaer, Earnwi.

Disposition. Many of the coins were retained by the Shelley family, the owners of the land on which the find was made until at least 1799 and cannot now be traced. Others were dispersed at the time of the discovery, forty being acquired by the Revd. Stebbing Shaw. These were probably sold in 1802 to Thomas Sharp, whose collection was later sold to the Revd. William Woolston, whose collection was sold after his death in 1817 to Matthew Young.

P. H. Robinson, BNJ xxxviii (1969), pp. 24-30: M. Dolley, SCBI B.M. H/N, pp. 44 and 53 (no. 185): idem, SNC 1962, pp. 106 and 107: Inventory—: F. Hackwood, Glimpses of Bygone Staffordshire, p. 19: idem, Staffordshire Sketches, p. 42: S. Shaw, History and Antiquities of Staffordshire, ii, part 1 (1801), p. 2 of the Additions and Corrections to the General History &c in Volume I: GM 1796, pp. 983-4: Aris's Birmingham Gazette, 9 March 1795: Staffordshire Advertiser, 7 March 1795.

### ACKNOWLEDGEMENTS

The writer is indebted to the Librarian and the Trustees of the William Salt Library in Stafford for permission to publish the extracts from the Shaw papers and to the Society of Antiquaries for permission to quote from their minutes of 1797. Mr. H. E. Pagan gave three very pertinent references while Mr. J. J. North, Mr. F. Elmore Jones, and Mr. C. Blunt, F.B.A., also gave help and advice. Mr. Michael Dolley, M.R.I.A., put me in touch with Mr. Pagan and read the draft, making several suggestions for its improvement.

# THE LOCH DOON TREASURE TROVE, 1966

# PETER WOODHEAD, IAN STEWART, AND GEORGE TATLER

LOCH Doon lies in the hills on the border between Ayrshire and Kirkcudbrightshire close to the route marked by the great motte at Dalmellington and to a chain of smaller ones, near which another Edwardian hoard was found in 1913, at Carsphairn, some ten miles away. On 19 April 1966 when the level of the loch was fairly low Mr. James T. Buchanan, a young angler from Dalmellington, saw some coins exposed on the bare foreshore near the water edge and gathered up in all 1,843 of them. Another angler, Mr. G. Tulip, helped him and later went back and recovered 44 more, making 1,887 in all.

The two portions of the hoard were handed to the police on the afternoon of 20 April; subsequently, they were declared treasure trove and a substantial reward representing the market value of the coins retained has been paid to the finders. The coins were submitted by the Queen's and Lord Treasurer's Remembrancer to Mr. Robert B. K. Stevenson, Keeper of the National Museum of Antiquities of Scotland, who invited us to make a detailed analysis and report on the hoard, and to whom we are most grateful for having enabled us to study the coins and for providing information about the circumstances of discovery.

The contents of the hoard, which consisted solely of pence (sterlings), may be summarized as follows:

England				
	Henry III	Short Cross	1	
	2580W0 208	Long Cross	1	
	Edward I			
	Edward II (including 40 of	Berwick mint)	1,762	
	Edward III)			1,764
Scotland				
	Alexander III		35	
	John Balliol		7	
	Robert Bruce		4	
				46
Ireland				
	Edward I		31	31
Aquitaine				
	Edward II		2	2
Other contin	ental		26	26
Imitations, I	orgeries, etc.		10	10
Unidentifiab	le fragments amounting to abou	ıt	8	8
TOTAL				1,887

The locality in which the coins were found<sup>2</sup> at about 700 OD, below rising ground named Muckle Eriff Hill on the Ordnance Survey map, is one of the more attractive for grazing on the rather wild east shore of the loch and has at some time probably been

<sup>&</sup>lt;sup>1</sup> Inventory 76,

<sup>&</sup>lt;sup>2</sup> Grid Reference NS 483004.

cultivated; the fields of a modern farm, Beoch, are immediately opposite. The loch was dammed in the 1930s and the water level raised so that the ground where the hoard was buried was flooded for some 200 yards back from the previous flood-line. A depth of two feet or so of soil has subsequently been washed away, thus forming the stone and gravel foreshore. Only the base  $(4\frac{1}{2}$  inches diameter) of the earthenware container of the hoard remained; it was a few inches beneath the present surface, and so originally almost 30 inches beneath ground level.

The location and circumstances leading up to the discovery clearly suggest that not all the coins originally hoarded may have come down to us. The extreme vulnerability of a jar progressively exposed as the topsoil was washed away, the motion of the water in the loch, and humans and animals blundering unwittingly in the shallows over a period of thirty years could well have led to some dispersion. This would not, of course, be likely to alter drastically the numismatic structure of the hoard and there is no reason to doubt that its bulk has survived intact.

Many of the coins are badly corroded and some are extremely brittle. This accounts for the proportion of unidentifiable fragments in the list (identifiable fragments are listed under country and ruler). The box in which the coins were received by us contained a residue of tiny fragments of such coins, perhaps detached since discovery and cleaning.

### EVIDENCE FOR DATING

The latest coin in the hoard is undoubtedly the English penny of Fox<sup>1</sup> XVd (No. 1760, Pl. I. 19) from the archiepiscopal mint of York which had opened in July 1331<sup>2</sup> after having been closed for more than thirty years.<sup>3</sup> It is uncertain for how long XVd continued to be struck at York or for how long the mint remained open. Certainly XVd cannot have been struck there after 1344, the date of the introduction of the succeeding 'florin' coinage. As will be shown, the probabilities are that the Loch Doon coin was struck considerably nearer the beginning than the end of this period.

Although we know of no mint accounts for York or for the other ecclesiastical privilege mints at this period, we do have figures for London and Canterbury. These show that after 1323 output became very small.<sup>4</sup> Silver for coinage was in increasingly short supply and, in the case of Canterbury, the mint was already inactive by Michaelmas 1323. At London, which did not close completely at this period, coinage of pence almost ceased after 1324 but a steady, low volume, output of halfpence and farthings continued. No doubt the requirements for small change were more satisfactorily met by coining the silver available into the fractional denominations. This pattern was interrupted by the reopening of Canterbury towards the end of 1328 and the issue from both Canterbury and from London (after February 1329) of small quantities of pence. This had ceased at London by Michaelmas 1330 and at Canterbury by Michaelmas 1331. Since no more pence were struck at either mint until those of the 'florin' coinage of 1344

York had closed by 31 Dec. 1300 following the great recoinage of crockards and pollards of that year (BNJ ix, 183).

<sup>&</sup>lt;sup>1</sup> The standard work on the series, 'The Numismatic History of the reigns of Edward I, II and III', by H. B. Earle Fox and J. S. Shirley-Fox, *BNJ* vi, vii, ix, and x (1910–14).

<sup>&</sup>lt;sup>2</sup> BNJ x, 105.

<sup>&</sup>lt;sup>3</sup> Both the royal and the archiepiscopal mints of

<sup>&</sup>lt;sup>4</sup> NC<sup>4</sup> xiii, 214-15 and 232-3 for this and other references to mint output at London and Canterbury made in this report.

these two short periods of activity, three years at Canterbury and one and a half years at London, must have covered the production at those two mints of all pence of XVd.

We cannot be sure that the duration of striking of coins of XVd was as brief at the ecclesiastical mints as it was at London and Canterbury. Indeed, the fact that York did not open until 1331 suggests that this is not so. However, the year 1335 is marked by a debasement and the ordinance relating to this change refers only to halfpence and farthings (which had continued to be struck in small quantities at London only). If any pence were being struck or were expected to be struck at any mint at all, it might be thought that the ordinance would have made reference to the larger and more important denomination. Furthermore, to strike pence at the old standard would have been uneconomic after 1335.

Admittedly we cannot completely rule out the possibility that, at an ecclesiastical privilege mint, small amounts of pence may have been coined at an uneconomic standard for purely political or prestigious reasons. Evidence exists which at first sight suggests that pence may have been struck at York in 1336.<sup>3</sup> The annals of the period make it plain that the leaders of the church were jealous of their temporal privileges and frequently sought to reconfirm and consolidate them: the king, on the other hand, used the granting or withdrawal of them as a lever to obtain the support of the Church for his various enterprises. However, any substantial coinage arising in this way seems unlikely and it may be significant in this context to note that of the Abbot of Reading, for whom coins commenced to be struck in 1338, only halfpennies are known although the ordinance provided for pence and farthings also.

York coins of XVd are somewhat more common than those of other mints of that group<sup>4</sup> pointing to an output comparable with or greater than London and Canterbury. The York pence appear to offer more varieties than those of the other mints, which might suggest a longer duration of issue.

Taking the various considerations set out above into account, we incline to the view that the bulk of the York pence of XVd, all of which were certainly struck after July 1331, are likely to have been struck before July 1335 and probably nearer to the earlier than to the later date.

- <sup>1</sup> Fox notes documentary evidence of dies having been sent to Durham in 1336 and to Bury St. Edmunds in 1340 (*BNJ* x, pp. 107–8). There is no certain evidence that those dies were used and, indeed, such use appears improbable.
  - <sup>2</sup> BNJ x, pp. 112 and 112-13.
- <sup>8</sup> The evidence referred to, for which we are indebted to notes left by the late H, Earle Fox in the possession of Mr. C. E. Blunt and which, so far as we are aware, has not been published in a numismatic context, is in Archbishop Melton's Register published in Raines's Fasti Eboracenses. This simply says:

'December 11th, 1336. We have received of our receiver at York £842: 11: 0. of our new money.' If the money in question was York pence of XVd then we appear to have a choice of the following possibilities:

 (a) that the new money had been struck before the 1335 debasement and subsequently held in stock for the use of the archbishop;

- (b) that the new money had been struck subsequent to the debasement of 1335 and to the new standard in spite of there being no reference to pence in the ordinance;
- (c) that the new money had been struck after the debasement but to the old standard, possibly for prestige reasons.

We cannot at this stage offer any conclusive evidence n favour of any one of these possibilities at the expense of the others. Indeed 'our new money' could simply have been any money newly received in the archbishop's treasury. The economic logic is against pence having been struck after 1335 and the amount in this case seems rather large for a prestige issue.

<sup>4</sup> A recent attempt to record as many specimens of XVd as possible gives York, 23 coins; Durham, 15 coins; Canterbury, 10 coins; London, 6 coins; Bury St. Edmunds, 2 coins. These numbers may yet be increased.

There are some features of the Loch Doon coin itself which suggest an early date in this bracket for the deposit of the hoard. These are as follows:

- (a) The letter  $\mathfrak A$  is of the distinctive form found on XVc and the letter  $\mathfrak A$  is Lombardic thus according with the XVd coins of London and Canterbury, all of which must be earlier. Durham coins of XVd (which if, as appears likely, attributable to Bishop de Bury, cannot be earlier than 1333)<sup>1</sup> have Roman forms of N and M on the reverse. Although they have Lombardic  $\mathfrak A$  on the obverse a new punch is used and other innovations can be noticed.
- (b) The initial cross shows the pellets in each angle which Fox attributed to Richard de Snoweshulle who was appointed Warden of the York mint on 8 August 1331.<sup>2</sup>
- (c) Finally, the perfectly uncirculated condition of the coin suggests that it passed through few hands before it was deposited. The absence of other coins of XVd from the hoard, however, is not particularly significant as it is a rare group (Montrave had nine out of 8,229 Edwardian pence).

Having weighed all the factors, we believe that, on the evidence of the York XVd penny, the Loch Doon hoard was deposited during the period August 1331 to July 1335, and perhaps no later than 1332–3.

It is interesting to reflect that had the single York coin of XVd not been present a date of deposit as early as 1323 might have been adduced. If such had been the case, in theory, the proportion of survivors of XVc from London and Canterbury as compared with the known output from those mints could have suggested an appropriate date of deposit between 1323 and 1329. In practice there are insufficient survivors in a hoard of this size to give a meaningful answer.

As it is, the burial and loss of the hoard could well have been occasioned by the arrival of Edward Balliol (son of John Balliol) and the 'Disinherited' in Scotland in August 1332, or by their subsequent activities. Balliol at once defeated the new regent, Mar, at Dupplin near Perth, and was crowned at Scone in September. Within three months, however, Balliol had been forced to seek refuge south of the Border. Later, with Edward III's backing, he returned and began to besiege Berwick in May 1333, winning an important victory nearby in July at Halidon Hill. Balliol in 1334 granted the southern counties of Scotland to Edward III, who promptly placed English garrisons in the castles and appointed English administrative officials. Some slight Scottish successes in 1334 led to new campaigns by Edward III in southern Scotland in the autumn of 1334 and summer of 1335, and he had to return to support his vassal king in the following years. The Loch Doon hoard seems to have been buried early in the Edward Balliol period, but any of these English campaigns could have occasioned its loss.

### COMPOSITION OF HOARD

The Loch Doon hoard is of typical composition for its deposit date. It shows the most characteristic features neither of a currency hoard nor of a long-term savings hoard and such evidence as there is points to a payment accumulation or a comparatively short-term savings hoard. There are no halfpence or farthings; earlier varieties show

a progressive degree of wear (although this feature is to some extent masked by the heavy corrosion suffered by some coins); the proportion of foreign sterlings is normal, and although the proportion of false or imitation coins appears somewhat higher than usual we cannot be sure that these were always correctly identified in some of the earlier hoard reports.

As reliable records of more hoards become available it is useful to build up a picture of what is apparently normal for the composition of a hoard of a given date. As the basis for comparison grows, so the ability to detect and identify circumstances relating to the accumulation and deposit of such hoards grows also. We have thought it of value, therefore, to compare Loch Doon with a number of other hoards of similar deposit date in respect of proportions of:

- (a) different nationalities;
- (b) English mints;
- (c) English classes (Fox groupings);
- (d) Irish coinages (Dolley classification<sup>2</sup>);
- (e) Scottish kings;
- (f) Scottish varieties of Alexander III (in this case also compared with earlier hoards deposited after his coinage ended in c. 1286).3

TABLE A

Comparison of Survivors of Different Nationalities

Hoard	Loch Doon	Aberdeen 4	Blackhills	Boyton	Bootham	Montrave	Renfrew
Total in hoard	1.887	12,267	2.058	4,137	908	9,313	619
Percentages	%	%	%	%	%	%	%
England	91.0	95.0	92.4	93.4	91.5	87.8	72.9
Berwick	2.1	1.8	3.4	1.6	1.0	1.7	0.2
Ireland	1.6	0.7	1.4	1.3	1.8	1.4	5-0
Scotland	2.4	1.1	2.0	2.3	4-4	3.0	21.7
Aquitaine	0-1	0.1	333		*0*	0.1	(***)
Continental	1.4	0.9	0.5	1.4	1-3	3.0	0.2
False, illegible, etc.	1.4	0.4	0.3	20.00	**	3.0	•.•.

## A. COMPARISON OF SURVIVORS OF DIFFERENT NATIONALITIES

With the exception of Renfrew, which is a special case,<sup>4</sup> it will be seen that the proportion of English coins as between the hoards compared is consistent to within  $\pm 3.5$  per cent. Although there can be considerable variation between one hoard and another in the representation of other national constituents these, in some instances,

published but it is possible to work from their reported contents with a useful degree of accuracy.

<sup>3</sup> These are Broughton (*BNJ* xxxv, pp. 120-7) and Dover (*BNJ* xxviii, pp. 147-68).

<sup>4</sup> Renfrew is atypical apparently as a result of a savings element closed c. 1300 being associated with a cash element closed c. 1321.

<sup>&</sup>lt;sup>1</sup> These are: Aberdeen 4 (c. 1324, Inventory 4), Ayr (c. 1320s, Inventory 19), Beaumont (c. 1360, Inventory 38), Blackhills (c. 1320s, Inventory 45), Bootham (c. 1320s, BNJ xxvii, p. 281), Borscar (c. 1330, Inventory 47), Boyton (c. 1324, Inventory 52), Carsphairn (c. 1320s Inventory 76), Montrave (c. 1360, Inventory 272), Renfrew (c. 1321, BNJ xxxv, pp. 128–47). Incomplete records prevent us from including every find in every comparison. Montrave and Blackhills were recorded before the Fox classification was

<sup>&</sup>lt;sup>2</sup> 'The Irish Mints of Edward I', Proc. Royal Irish Acad. 66c (1968), 235-96.

are represented by a comparatively small number of coins and are thus more likely to have been influenced by the chance of survival. Nevertheless, this is probably not the whole explanation and we must accept that these variations may also be the result of quite unpredictable aspects of accumulation, such as the personal travels and preferences of the hoarder, and of obscure geographical and political influences.

It will be noted that, at least at this period, the location of the hoard has little apparent effect on its composition.

### B. COMPARISON OF ENGLISH MINTS

TABLE B

Comparison of Survivors from English Mints

Hoard	Loch Doon	Aberdeen 4	Blackhills	Boyton	Bootham	Montrave	Renfrew
No. of English				52			
in hoard*	1,724	11,671	1,905	3,863	830	8,229	451
Percentages	%	%	%	%	%	%	%
Bristol	2.4	2.4	2.3	2.2	1.9	2.6	6.8
Bury St. Edmunds	3.6	3.7	2.7	4.9	5.0	4.1	1.8
Canterbury	27.6	27.2	25.6	29.6	24.0	26.8	14.3
Chester	0.1	0.2	0.2	0.2	0.1	0.1	8914
Durham	10.3	9.5	11.4	8.5	9-5	8.1	5·3
Exeter	0.2	0.1	0.2	0.1	30.00	0.2	60 N
Hull	0.3	0-1	0.4	0.2	0.1	0.2	14.04
Lincoln	0.7	0.9	0.5	0.4	1.8	1.1	1-8
London	51.5	50.5	53.5	50.8	51.8	53.1	61.4
Newcastle	1.3	1.3	0.9	1.2	0.7	1.3	1.1
York, royal	1.5)	0.2	1.9	1.6	3.91	2.4	7.1
York, episcopal	0.3	2.3	0.3	0.3	0.51	2.4	0.4
Uncertain	0.2	1.8	0.1	125	0.1		2.5
Berwick (as percentage of English total)	2·1	1.9	3.7	1.8	1.1	2·1	0.2

<sup>\*</sup> Excluding coins of the Berwick mint.

# C. COMPARISON OF ENGLISH GROUPS (FOX CLASSIFICATION)

Loch Doon clearly falls into line with Blackhills, Boyton, and Montrave. Renfrew, as already noted, is exceptional in many respects. The uneven pattern as between classes shown by the Bootham hoard was noted on its original publication and we would not wish to amend the explanation then suggested for this of a family nest-egg, now added to, now subtracted from, over a period of many years.

It is of interest to compare the proportions of the latest and penultimate groups in the hoards deposited in the 1320s and early 1330s with the proportions of the same groups in Montrave which was deposited some thirty years later. This suggests that more recent issues accounted for a larger proportion of the coins in circulation than a comparison of the bullion coined figures would lead one to expect.

TABLE C

Comparison of English Groups (Fox Classification)

H	oard	Loch Doon	Blackhills	Boyton	Bootham	Montrave	Renfrew
Estimated	d deposit date	1332	1320	1325	1326	1360	1321
No. of Eng	lish in hoard*	1,724	1,905	3,863	830	8,229	451
Perc	entages	%	%	%	%	%	%
Fox groups:	Ia-Ic	0.6	0.9	0.7	0.7	0.7	0.7
(A) (E)	Id-Vb	20.8	22.6	19.3	45.5	26.9	82.5
	VIa-IXa	3.1	3.6	2.1	2.5	3.5	3.2
	IXb	10-2	9.4	9.7	4.6	9.3	2.0
	Xa-Xf	40.3	39.0	41.5	22.4	39.8	8.6
	XIa-XII	11.5	16.2	12.4	10.0	11-3	1.6
	XIII-XIV	6.2	8.3	8.2	7.1	6.9	1.1
	XVa-c	4.8	2.00	6.0	7.2	1.5	0.4
	XVd	0.1	3000		• •	0.1	99
Uncertain, in	decipherable, etc.	2.4	9.00	0.1			

Mules are attributed according to the later die

# D. COMPARISON OF IRISH COINAGES (DOLLEY CLASSIFICATION)

It would certainly be wrong to give too much weight to the varying proportion of Irish representation in the hoards compared, when the numbers of individual coins are so small in each case. Nevertheless it is worth remarking that Loch Doon has a rather small representation of Dolley 2nd coinage and a rather large representation of Dolley 6th coinage. This would be a useful pointer if the hoard were unusual in any other related sense, but there appears to be no sign of this and we must, therefore, regard it as a purely fortuitous feature.

TABLE D

Comparison of Irish Coinages (Dolley Classification)

Hoard	Loch Doon	Blackhills	Boyton	Bootham	Renfrew
No. of Irish in hoard Percentages	31	28 %	54 %	16 %	31 %
Dolley 1st coinage	11	7	2	6	10
2nd ,,	51	74	65	69	74
3rd ,,	3	**	6	13	10
4th ,,	1.00	966	• •	94.4	1904
5th ,,		***	4	6	3
6th ,,	35	19	23	6	3

<sup>\*</sup> Excluding coins of the Berwick mint.

### E. PROPORTIONS OF SCOTTISH COINS OF DIFFERENT KINGS

TABLE E
Scottish Element by Reigns

Hoard	Date	Scottish total	Alexander III	John Balliol	Robert Bruce
Aberdeen 4	1320s	131	84.7	9.2	6-1
Ayr	1320s	44	79.6	4.5	15-9
Beaumont	c. 1360	37	94.6	2.7	2.7
Blackhills	c. 1320	43	67-4	18.6	14.0
Borscar	c.1330+	8	62.5	25.0	12.5
Carsphairn	1320s	72	83.3	12.5	4-2
Loch Doon	c. 1332	46	76.1	15.2	8.7
Montrave	c. 1360	290	85.9	10.0	4.1
Renfrew	c. 1321	134	95.5	0.8	3.7
Total		805			
Average percentage			85-4	8.8	5.8

# F. PROPORTION OF SCOTTISH VARIETIES OF ALEXANDER III

TABLE F
Regular Alexandrian Sterlings in Six Edwardian Hoards Analysed by Reverse Types

Hoard	Boot	ham	Boy	ton	Broug	hton	Loch I	Doon	Do	er	Rent	rew	To	tal
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Group I		1.0		,		,,,		2.00		77.56.				790
24 points only	9	24	26	33	4	13	7	20	75	22	25	20	146	22
Group II														
20 points	3	8	4	5	1	3	3	9	17	5	3	2	31	5
21	1	3	**		**		100		1	< 1	***		2	< 1
22	***		•00							< 1	- 1	1	2	< 1
23	1	3	4	5	1	3	5	14	13	4	3	2	27	4
24	17	44	23	30	13	40	9	26	120	34	51	41	233	35
24 25	22		10	13	5	16	5	14	20	6	13	10	53	8
26	7	18	10	13	7	22	6	17	94	26	27	22	151	23
27	**		•				**		**		600		**	
28			1	1	1	3	***		2	1	3	2	7	1
TOTAL	38		78		32		35		343		126		652	

## THE COINS

Although Loch Doon contains hardly any important new varieties there are a few coins of the scarcer types which are worth noting and illustrating, particularly in those cases where die analyses are being or may be undertaken.

In the English series we illustrate, of Bury St. Edmunds, the specimens of VIIIa (No. 90. Pl. I. 1) and IXa (No. 91 Pl. I. 2) and, of Chester, the coin of IXb (No. 620. Pl. I. 3).

Of Durham we illustrate the penny of the rare variety of IVb with a cross moline in one quarter of the reverse (No. 628. Pl. I. 4) and also the penny of Vb (No. 631. Pl. I. 5) a variety which has so far only been recorded from two obverse dies—possibly all that

were used for the very small output which the proportion of survivors indicates. Still of Durham we illustrate a coin of IXb with an unusual obverse die (No. 635. Pl. I. 6) and a Xa/IXb mule (No. 651. Pl. I. 7)—the latter much less common for that mint than the IXb/X mule—and a coin of Xb with plain initial cross (No. 655. Pl. I. 8). All the Durham plain cross Xb coins seen by us have been of this type which shows considerable differences in lettering from other coins of Xb, suggesting perhaps that we should regard this variety with some caution in relating it to the normal coins of Xb.

Among the London coins is a specimen of Id with annulet on the king's breast (No. 839. Pl. I. 9). This is the variety which it has been suggested may have been struck at London for the Abbot of Reading. There are two specimens of the rare group VIb both of which are illustrated (Nos. 1039–40. Pl. I. 10 and 11). It will be noted that one has the unusual obverse reading EDWAR. We also illustrate the two specimens of the scarce group VIIa (Nos. 1041–2. Pl. I. 12 and 13), and a coin of Xb/IXb with a trifoliate crown (No. 1210. Pl. I. 14).

Of Newcastle we illustrate a mule IXb/Xa which is of curious style although there is no reason to suspect that the coin was not an official issue (No. 1725. Pl. I. 15). We illustrate all three of the coins of IXb of the York archiepiscopal mint as we consider that a die study of the small output of that mint might prove rewarding (Nos. 1757–9. Pl. I. 16–18). We also illustrate the York penny of XVd, the latest coin in the hoard (No. 1760. Pl I. 19).

Of the Irish series we have illustrated the two mules, Irish/Canterbury and English/Dublin (Nos. 1804–5. Pl. I. 20 and 21). Although of acceptable weight and of a good standard of execution it is our view that these are not official issues and are, more probably, continental imitations.

Of the Scottish series we have illustrated two unusual sterlings of Alexander III (Nos. 1810 and 1821, Pl. I. 22 and 23) and all the coins of John Balliol and Robert Bruce (Nos. 1841–1851, Pl. I. 24–34) in the hope that it will prove possible in time to make a die analysis of the relatively rare coins of these two reigns. Some comments on the Balliol dies are noted under individual coins in the catalogue.

We have illustrated the continental sterling which cannot be identified with a Chautard reference (No. 1879, Pl. I. 35). This, however, could equally well be a better than average contemporary forgery with a 'nonsense' reverse reading.

#### DISPOSITION

Upon completion of our examination of the coins they were returned to Mr. Stevenson at the National Museum of Antiquities of Scotland who has kindly supplied the following information on their disposition:

313 coins have been retained by the National Museum of Antiquities of Scotland including the latest coin in the hoard (no. 1760), 33 Scottish (including all the coins of Robert Bruce except one—see below), 7 Irish, 7 foreign, and all the imitations.

55 coins have been taken by the Hunterian Museum including nos. 839, 1810, and 1847.

14 coins have been acquired by the Ayr Carnegie Library and Museum including one of Robert Bruce.

The rest of the find was returned to the finders and the greater part is believed to be in the course of disposal through the trade.

### NOTES ON THE CATALOGUE

The comprehensive selection of English pence of Fox group Xc-f in this hoard (594 in all) induced us to attempt to develop and improve the revised classification for those coins introduced first in the Whittonstall hoard report¹ and subsequently elaborated in 'Edwardian Sterlings in the Montrave Hoard'.² The object was to provide a framework for classifying these very abundant coins that were struck over the best part of a decade that would be easier to use than the Fox classification, which presents some difficulties. We believe that we have now achieved some success in doing this. We have also felt that this revision of Xc-f could usefully also have coupled to it a summary of other revisions and modifications to the entire Fox classification of the pence of Edward I and II. The resultant paper is too substantial to include in this hoard analysis and will, we hope, be published separately in a future number of this *Journal*. In preparing the catalogue for the present report we have restricted ourselves to the use of the basic subdivisions for Xc-e described in the Montrave Hoard paper but we shall give a more detailed breakdown according to our revised classification in our forthcoming study.

We are indebted to Mr. Stevenson and the staff of the National Museum of Antiquities of Scotland for weighing all the coins in the hoard. Since the weights individually do not reveal anything unexpected, are of specialized interest and, in this particular case, somewhat reduced in value owing to the substantial proportion of corroded coins, we have decided not to print them in this report. Copies of the list of weights have been placed in the Coin and Medal Department of the British Museum, the combined libraries of the Royal and British Numismatic Societies, The National Museum of Ireland, the Ulster Museum, the Ashmolean Museum, the Fitzwilliam Museum, and the American Numismatic Society; of course a copy is retained in the NMAS.

For easy reference the English portion of the Catalogue is summarized by mint and Fox group in Table G.

#### SUMMARY

A summary of the hoard in the Inventory format could be as follows:

LOCH DOON, Kirkudbrightshire (NS 483004). 19/20 April 1966. 1887 & English, Irish, Scottish, Anglo-Gallic, and Foreign. Deposit: c. 1332/35.

ENGLAND (1764 pence):

Henry III. Short-cross coinage—London; Lawrence class 6: Raulf, 1. Long-cross coinage—London, Lawrence class 5g: Renaud, 1. Edward I.—Berwick, Blunt class 1a, 1; 1a/2a, 1; 2a, 1; 3a, 7; 3b, 1; 3 uncertain, 1; 4a, 3; 4b, 10; 4c, 6; 4 uncertain, 3; uncertain, 2. Bristol, Fox class IIb, 8; IIIc, 6; IIId, 6; IIIg, 8; IX, 12. Bury St. Edmunds, IIIg, 3; IVa, 12; IVb, 12; VIIIa, 1; IXa, 1; IXb, 4; Xa, 2; Xb, 2; Xc-e, 12. Canterbury, IIb, 2; IIIb, 1; IIIc, 3; IIId, 2; IIIf, 1; IIIg, 13; IVa, 10; IVb-c, 23; IVd, 9; IVd/e, 1; IVe, 3; IVe/d, 1; IVe/Va, 1; Vb, 2; IXa, 3; IXb, 20; IXb/Xa, 1; Xa, 10; Xb, 29; X EDWRR, 3; Xc-e, 166; Xf, 15. Chester, IXb, 1. Durham, Bp. de Insula, IIb, 1; IIIb, 1; IIIe, 1; IIIg, 3; IVa, 1; Bp. Bek, IVb, 2; IVd, 1; Vb, 1; IXb, 5; No mark, IXb, 14; Xa/IXb, 1; Xa, 3; Xb, 1; Bp. Bek, Xb, 3; Xc-e, 45; No mark, Xc-e, 14; Xc-e initial mark illegible, 9; Bishop Bek, Xf, 3. Exeter, IXb, 4. Kingston-upon-Hull, IXb, 6. Lincoln, IIIc, 1; IIId, 2; IIIf, 1; IIIg, 8. London, Ia/c, 1; Ic/Ia, 1; Ic, 9; Id, 8 (one with annulet on breast); IIa, 9; IIb, 2; IIIa, 2; IIIb, 3; IIIc, 22; IIId, 12; IIIf, 2; IIIg, 30; IVa, 9; IVb-c, 46; IVd, 25; IVe/d, 1; IVe, 10; IVe/Va, 1; Va, 6; VIb, 2; VIIa, 2; VIIIa, 18; VIIIb,

<sup>&</sup>lt;sup>1</sup> Archaeologia Aeliana, 4th Ser., vol. xli (1963).

TABLE G

Loch Doon Hoard. English Edwardian Sterlings by Mint and Fox Group

Group Mini	a b	1	d	a	i b	á	ь	c	111 d	e	f g	á	- <u>b</u>	IV C	d	e	~~ a		VI a~l	ν ~	$\widetilde{b}$	VIII a b		х ~ъ			····	1	X c	e <u>i</u>		\ s	_	XI b	-	XII	XIII	XI	,	- t	XV	, 	d	Sub-total	Uncertain	Total
Bristol					8			6	6		8													1	12																			40		40
Bury St. Edmunds					_			_			3	2	2									1	1		4	2	2		5		7	2	2	5			4	10	-	_	6	-		62		62
Canterbury					Z		1	3	2		1 13	9	23		9	5	1	2					3	- 2	20 I	1 3	2	31	49	7	1 1	5 1	6	49	3	3	24	24	6	[0]	4	11		460	15	475
Chester													-					,							,			_			-						_		_		_					100
Durham					ι		ı			1	د	ī	2		1			1							19	4	4	6	) /	3	1	3 1	3	19	3		7		3		7	12		167	11	178
Excier Hull																									6																			4		4
Lincoln								1	2		1 8														•																			12		12
London		11	8	9	21	2	3 :	22	2		2 30	9	45	1 :	5 1	ı	7		2	: 2		18 1	0 10	: 9	90 2	9 4	14	95	87	12	0 1	0 3	15	45		3	14	1	б	4	9	6		873	13	886
Newcastle										3															7 1	ı	ı															-		22		22
York Royal					4		5	4		3														1	10																			26		26
York Episcopal										2															3																		1	6		6
Uncertain																																													4	4
Berwick						_				_																																				40
Totals		[1	8	9	36	2	10	36 2	22	9	4 65	21	7,2	1 :	5 1	6	8	3	2	. 2		19 I	0 20	1.	76 5	57 8	33 1	132	158	23	5 3	0 6	66	118	б	б	49	5	7	16	36	31	1	1,679	43	1,762

Total of English in hoard as above plus one Short Cross and one Long Cross penny, and ten imitations, 1,764 in all.

10; IXa, 16; IXb, 90; Xa/IXb, 21; Xa, 8; Xb/IXb, 5 (one with trifoliate crown); Xb, 35; X EDWRR, 4; Xc-e, 315; Xf, 10. Newcastle, IIIe, 3; IXb, 7; IXb/Xa, 9; Xa, 2; Xb, 1. York, Royal mint, IIb, 4; IIIb, 5; IIIc, 4; IIIe, 3; IXb, 10. Archbishop's mint, IIIe, 2 (one with quatrefoil on obverse and reverse, the other on reverse only); IXb, 3. Mint illegible or uncertain, 4. Edward II—Berwick, Blunt class 5, 2; 7, 2; Bury St. Edmunds, Fox class XIa, 2; XIb, 5; XIII, 4; XIV, 10; XVa, 2; XVb, 6; XVc, 2. Canterbury, XIa, 16; XIb, 46; XIa or b, 3; XIc/b, 1; XIb/c, 2; XII, 3; XIII, 24; XIV, 26; XVa, 10; XVb, 14; XVc, 11. Durham, Bp. Bek, XIa, 5; Bp. Kellawe, XIa, 8; XIb, 19; XIc, 3; XIII, 7; Bp. Beaumont, XIV, 5; XVb, 7; XVc, 12; XIV—XV uncertain, 2; Bp. uncertain, XI—XV, 1. London, XIa, 35; XIb, 43; XIa or b, 2; XII, 3; XIII, 14; XIV, 16; XVa, 4; XVb, 9; XVc, 6. Edward III—York, Fox class XVd, 1.

## IRELAND (31 pence):

Edward I.—Dublin, Dolley coinage 1, 3; 2, 7; 3, 1; 6, 10. Waterford, 2, 8. Mule, Dolley coinage 2/ Canterbury IIIg, 1. Mule, Fox class IIIc/Dublin, Dolley coinage 2, 1. These two mules are to some degree irregular and may be unofficial imitations.

## SCOTLAND (46 pence):

Alexander III, 2nd coinage (c. 1280-6), 35: John Balliol, rough issue Rex Scotorum, 5; St. Andrews, 2; Robert Bruce, 4.

## ANGLO-GALLIC (2 sterlings):

Edward II, Hewlett, pp. 70-1 variety c/b, 1; unpub. variant/b, 1.

### FOREIGN (26 sterlings):

ARLEUX, Jean de Flandre, Ch. pl. xviii. 2, 1. CAMBRAI, Guy de Collemède, Ch. pl. xviii, 8, 1. FLANDERS, Guy de Dampierre, Ch. pl. ii. 6, 1; 1, 1; Robert de Béthune, Ch. pl. iii. 1, 7; 2, 1; 3, 4. HAINAUT, Jean II d'Avesnes, Ch. pl. iv. 9, 1. LIGNY, Valéran II, Ch. pl. xviii. 8, 1; LUXEMBOURG, Jean l'Aveugle, Ch. pl. xv. 9, 2; NAMUR, Guy de Dampierre, Ch. pl. v. 5 var., 1; PORCIEN, Gaucher de Châtillon, Ch. pl. xix. 3, 4; UNCERTAIN, 1.

### INDECIPHERABLE FRAGMENTS amounting to at least 8 coins.

Discovery: On the shore of Loch Doon by fishermen some 200 yards back from the shoreline that existed before the level of the loch was raised by damming. The coins had been contained in an earthenware vessel only the base of which remained.

Disposition: Selection retained for themselves and others by the National Museum of Antiquities, Edinburgh, the remainder (about 1400) returned to the finder and believed disposed of by him.

### CATALOGUE OF COINS

(all coins are pence)

\* after a number indicates that one coin has come from a group left uncleaned to show typical hoard patina.

† after a number indicates that one coin has come from the group handed in separately from the main body of the hoard (see introduction).

### **ENGLAND**

### SHORT CROSS SERIES

MINT OF LONDON

1 Lawrence Class 6. RAVLF.ON.LVNDE 1† 1

LONG CROSS SERIES

MINT OF LONDON
2 Lawrence Class Vg RENAVD ON LVND 1 1

# EDWARD I, II, AND III

# MINT OF BERWICK-ON-TWEED

	MINI OF DERWICK-ON-I WELD	
3	Blunt type 1a	1
4	1a/2a	i
5	2a	î
6-12	3 <i>a</i>	7†
D 20 C 1 C C C C C C C C C C C C C C C C C		1311
13	3 <i>b</i>	1
14	3 poor coin, sub-variety uncertain	1
15–17	4 <i>a</i>	3†
18-27	4 <i>b</i>	10
28-33	4 <i>c</i>	6
34-6	4b or c (poor coins)	3
37-8	5	2
39-40	7	2 2
	51	2
41-2	uncertain (poor coins)	40
		40
	MINT OF BRISTOL	
43-50	Fox Group IIb	8
51-6	IIIc	6
		6
57–62	IIId	9
63–6	IIIg early S	4
67-8	IIIg late S/early S	2
69-70	IIIg late S	2 2
71-82	IXb	12
		40
	94200F - 2504427600479246 14210760 1621076	
	MINT OF BURY ST. EDMUNDS	
83	Fox Group IIIg early S ROBERT DE hadeleie	1
84-5	IIIg late S robert de hadeleie	2
1. The second se	IVa (Burns A20) ROBERTVS DE hADL'	12
86–7		F0()
88-9	IVb robert de hadeleie	2
90	$VIIIa_1$ (Pl. I. 1)	1
91	$IXa_2$ (Pl. I. 2)	1
92-5	IXb	4
96-7	Xa	2
98-9	Xb	2
100-4	Xc-e Crown 2	2 2 5 7 2 2
	Xc-e Crown 3	7
105-11		2
112-13	Xf	ź
114–15	XIa	2
116-20	XIb	
121-4	XIII	4
125-34	XIV	10
135-6	XVa	2 6
137-42	XVb	6
143-4	XVc	2
143-4	Ayc	62
		02
	MINT OF CANTERBURY	
145-6	Fox Group IIb	2†
147	$\Pi b$	1
148-50	IIIc	3
	$\Pi d$	2
151-2		ī
153	III f	1
154	IIIg early S	
155	IIIg early S/late S	1
156-66	IIIg late S	11
167	IVa (Burns A19)	1
168-76	IVa	9
177-99	IVb-c	23
200-8	IVd	9
200-0	TVU	554

44		THE LOCH DOON TREASURE TROVE, 1966		
370	209	IVd/IVe	1	
	210-12	IVe	3	
	213	IVe/IVd	1	
	214	IVe/Va	1	
	215-16	Vb	2 3	
	217-19	$IXa_1$		
	220–39 240	IXb IXb/Xa	20	
	241-50	Xa	10	
	251-79	Xb	29††	
	280-2	X with reading EDWR'R	3	
	283-313	Xc-e Crown 1	31††	
	314-62	Xc-e Crown 2	49††	
	363-441 442-8	Xc-e Crown 3 Xc-e uncertain crown (poor coins)	79 7†	
	449-63	Xf	15	
	464-79	XIa	16†	
	480-525	XIb, 5 read EDWARR	46†	
	526-8	XIa or b (poor specimens)	3	
	529	XIc/XIb	1	
	530-1 532-4	XIb/XIc XII	2	
	535-58	XIII	24†	
	559-84	XIV	26	
	585-94	XVa	10	
	595-608	XVb	14	
	609–19	XVc	11†	475
				7/3
	(20	MINT OF CHESTER	2	
	620	Fox Group IX $b$ (PI, I, 3)	1	1
		MINT OF DURHAM		
	621	Bishop de Insula Fox Group IIb	1	
	622	IIIb	î	
	623	Ше	1	
	624-6	IIIg late S	3	
	627	IVa (Burns A20)	1	
		Bishop Bek		
	628	IVb cross moline in one quarter of rev. (Pl. I. 4)	1	
	629 630	IVb cross moline at start of obv. and rev. legends IVd	1	
	631	Vb (Pl. I. 5)	1	
	632-5	IXb cross moline on obv. only; one with a curious	*	
		obv. die illustrated (Pl. I. 6)	4	
	636	IXb as last but false or local dies?	1	
		No episcopal mark		
	637-50	IXb	14	
	651	Xa/IXb (Pl. I. 7)	1	
	652–4 655	Xa Xb obv. die unusual (Pl. I. 8)	3	
	055	13204 ASI U		
	656 9	Bishop Bek Xb	2	
	656–8 659–64	Xc-e Crown 1	3 6†	
	665-72	Xc-e Crown 2	8	
		No episcopal mark		
	673-81	Xc-e Crown 2	9	
	075-01	AC-E CIONII 2	-	

	THE LOCH DOON TREASURE TROVE, 1966	5		45
	Bishop Bek			
682-700	Xc-e Crown 3	19		
701.2	No episcopal mark			
701-2	Xc-e Crown 3	2		
	Bishop Bek			
703-11	Xc-e Crown 3	9†		
	No episcopal mark			
712-13	Xc-e Crown 3	2		
	Bishon Bale			
714–16	Bishop Bek $Xc-e$ crown uncertain (poor coins)	3		
714-10	Ac-e crown uncertain (poor coms)	3		
	No episcopal mark			
717	Xc-e crown uncertain (poor coin)	1		
	Initial cross illegible (poor coins)			
718-22	Xc-e Crown 3	5		
723-6	Xc-e Crown uncertain (poor coins)	4		
	Bishop Bek			
727-9	Xf	3		
730-4	XIa	5		
222 St	Bishop Kellawe			
735–42 743–5	XIa XIa or XIb (poor specimens)	8		
746-61	XIb, one reads EDWARR	16		
762-4	XIc all read EDWAR	16 3 7		
765–71	XIII	7		
770 (	Bishop Beaumont			
772–6 777–83	XIV XVb	5 7		
784–95	XVc	12		
796–7	XIV-XV poor specimens, group uncertain	2††		
	Uncertain Bishop			
798	XI-XV reads EDWARR	1		
			178	
	MINT OF EXETER			
799-802	Fox Group IXb	4	194100	
			4	
	MINT OF KINGSTON-UPON-HULL			
803-68	Fox Group IXb	6	ar.	
			6	
000	MINT OF LINCOLN	921		
809 810–11	Fox Group IIIc IIId	1 2		
812	IIIf	2		
813-18	IIIg early S	6† 2		
819–20	IIIg late S	2	12	
	W		12	
001	MINT OF LONDON	760		
821 822	Fox Group Ia/Ic no hair on forehead Ic/Ia	1		
823-31	Ic, one reads EDWREXEX	9		

832-8	Id, one reads EDWRITINGL'DL'DNYB	7†	
839	Id annulet on breast (Pl. I. 9)	1	
840-8	$\coprod a$	9†	
849-69	$\Pi b$	21	
870-1	IIIa	2	
872-4	IIIb	3	
875	IIIc with crown of IIIb (Burns A11)	1	
876-96	IIIc	21†*	
897-908	IIId	12	
909-10	IIIf	2	
911-21	IIIg early S	11†	
922-5	IIIg late S/early S	4	
926-40	IIIg late S	15	
941	IVa (Burns A19)	1	
942-9	IVa	8	
950-94	IVb-c	45††	
995	IVc	1	
996-1020	IVd	25†	
1021	IVe/d	1	
1022-30	IVe	9	
1031	IVe CIVI/·TAS	1	
1032	IVe/Va	1	
1033-38	Va	6	
1039-40	VIb, one reads EDWARANGL (Pl. I, 10 and 11)	2 2 5	
1041-2	VIIa (Pl. I. 12 and 13)	-2	
1043-7	$VIIIa_1$		
1048-60	VIIIa <sub>2</sub>	13	
1061-70	VIIIb one reads h'yb'	10	
1071-7	$IXa_1$	7	
1078-86	$IXa_2$	9	
1087-1176	IXb	90†	
1177-97	Xa/IXb	21	
1198-1205	Xa	8	
1206-9	Xb/IXb	4	
1210	Xb trifoliate crown/IXb (Pl. I. 14)	1	
1211-45	Xb	35	
1246-9	X reads EDWR'R	4	
1250-1344	Xc-e Crown 1	95††	
1345-1431	Xc-e Crown 2, one reads hyB: and another hyB:	87†††*	
1432-1557	Xc-e Crown 3	126	
1558-64	$X_{c-e}$ uncertain crown (poor coins)	7	
1565-74	Xf, one with hyb:	10	
1575-1609	XIa	35	
1610-52	XIb, 6 read EDWARR	43	
1653-4	XIa or b	2	
1655-7	XII	3	
1658-71	XIII	14	
1672-87	XIV	16	
1688-91	XVa	4	
1692-1700	XVb	9	
1701-6	XVc	6	
1701-0	A.A.A.S.		886
	MINT OF NEWCASTLE		
1707-9	Fox Group IIIe	3	
1710-16	IXb	7†	
1717-25	IXb/Xa one of curious style illustrated (Pl. I. 15)	9	
1717-23	Xa	2	
1728	Xb	7† 9 2 1	
1/20		- E	22

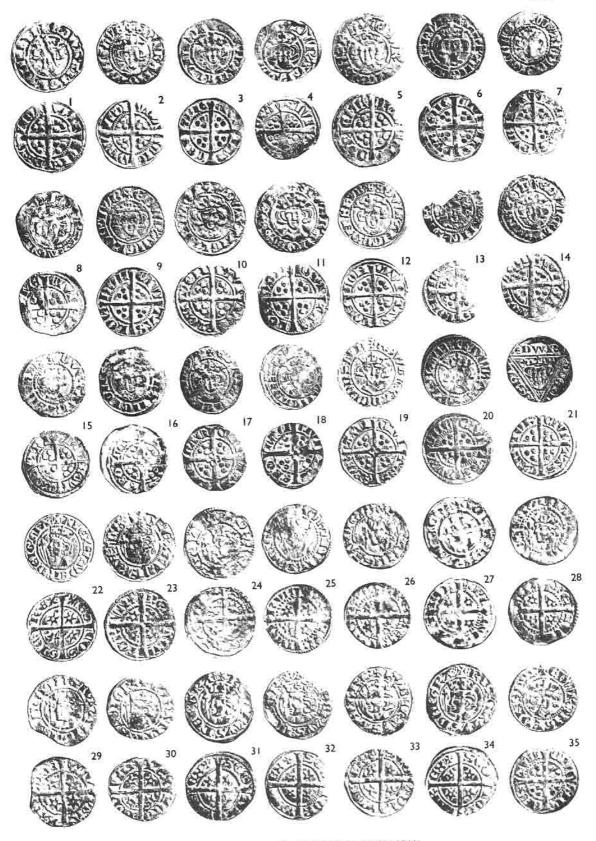
		THE LO	сн рос	ON TREASURE TROVE, 1966			4	7
	1729-32 1733-7 1738-41 1742-4 1745-54	I	0.000	AL MINT OF YORK	4 5 4† 3 10†	26		
			RCHIEPI	SCOPAL MINT OF YORK				
	1755 1756 1757–9 1760	Fox Group I	IIIe quatre	foil on <i>rev</i> . only foil on <i>obv</i> , and <i>rev</i> . 16–18)	1 1 3 1	6		
	IMITATI	ONS (see also	under Co	NTINENTAL for foreign sterlings of En	alish type)			
	1761–7 1768 1769 1770	Reading CIVI Reading CIVI Reading CIVI Reading CIVI	ITAS LONDO ITAS CANTO ITAS CANTO	R B	7 1 1† 1	10		
		Poor C	Coine Mi	NT ILLEGIBLE OR UNCERTAIN				
	1771 1772–4		ading, perl	haps VILL/ABE/REW/ICI	1 3*	4		
				IRELAND				
			М	INT OF DUBLIN				
1775-6 1777 1778-82 1783 1784 1785	Allen class	B, Dolley B, " C/D, " C/D, " E, " F, "		no stops, crown similar to Fox IIIc no stops, crown as Fox IIIg, reads 'n no stops between DNs and hyb letter R with 'scroll tail'; stops after square E with cross before Lombar LINIE	ANGL and D	тв- 1		
1786–94 1795	" "	Hi, " Hii, "	6th ,,	large letters on reverse small letters on reverse, pellet under b of a small crescent	oust in the for	m 1		
							2	1
			Min	T OF WATERFORD				
1796–1802 1803		C/D, Dolley C/D, ,,		ge; two read VATERFOR no stops after ANGL and DNS		7		8
maketor!	79000 Luces	g ener		sh/Canterbury mule				
1804		n class C/D, I lar to Fox gro		coinage ate S. (Pl. I. 21)		1		
			E	nglish Dublin mule				
1805				olon after hyb, irregular style Dolley 2nd coinage. (Pl. 1. 20)		1		2

# SCOTLAND

#### ALEXANDER III, 2ND COINAGE c. 1280-6 (+)

		ALEXANDER I	II, 2ND COI	NAGE c. 1280–6 (+)	
	Burns Group I.	Rev.: 4 mullets of	points only		
1806 1807–9 1810	Burns class I I/III II	Stewart class B B/C A	B. fig. ref. cf. 142 cf. 145/6 B	medium head; plain x medium head; plain x Obv. **(potent) ALEXSANDER DEIG'CIA: Rev. **Es/cos/sie:/Rex (Pl. I, 22) (There is a die-duplicate of this coin in	3
1811 1812	III III/I	C C/B	cf. 151 153	National Museum, Edinburgh, Richardson Catalogue, Addenda No. 100) Closed C. X potent	1 1 1*
	Burns Group II			<b>≥</b> 2000 • 700 °	
1318.018	T. Martin Market		. 4 mullets of		
1813 1814 1815 1816–18 1819–21	I (?) II/III III III III/III	D E/F, G F, G F, G F, G/E	158 <i>a</i> 176 184 198 203	Double struck and badly broken  Second head Third head One (No. 1821) with obv. inscription disturbed; perhaps recut (DE of <i>Dei</i> over IE?), or double struck (Pl. I. 23)	1 1 3 3
		Rev	: 4 mullets of	5 points	
1822-3	П	E	165		2†
1824	II	E	166	Faint pellets on rev.	1
		Rev.: 1 mu	illet of 5 point	s, 3 of 6 points	
1825-8	П	E	168	One rev. double-struck; one corroded and chipped	4
1829	Ш	F, G	199	Third head	1
		Rev.: 3 mulle	ts of 6 points,	1 star of 7 points	
1830	I/III	D/F, G	164	Special head, broken	1
1831	11/111	E/F, G	177	Market and the control of the contro	1
1832-3	ш	F, G	179	First head?	2
		Rev.: 2 mullet	s of 6 points,	2 stars of 7 points	
1834	I	D	160		1
1835	II	E	170		1
1836-7	II/I	E/D	174	Conned hand	1 2 3*
1838–40	III/II	F, G/E	191	Second head	3
		Iouv P	11101 120	6 (all DL I)	
			ALLIOL, 1292		
	All house as female	ard and (except 184		mullets of 6 points)	
1841	Same obv. die as 1958, pp. 1-2 an Cochran-Patric	Balliol/Alexander of Pl. I. 57; also in No. k lot 174).	mule (that coin C new series, x	n is discussed and illustrated in NC <sup>6</sup> xviii, i, p. 283 and xii, Pl. XI. 8; Burns i, p. 224;	
		O/RVN. A thin line b			
1842	Well-made lette	rs on obv.	obv. die are re	ecorded from different rev. dies). (Pl. I. 24)	1
1843	Rev.: Circles of Relatively well-		Mullet in 3	(Pl. I. 25) rd quarter shows stalks (? through over-	1
45.0				e rev. is in N.M.A.S. from Craigengillan (Pl. I. 26)	1

	THE LOCH DOON TREASURE TROVE, 1966		49
1844	Similar but barred A and normal mullets. (Pl. I. 27)	1	
1845	Obv. Broad, coarse head (cf. B. fig. 213, but different die); crown double punched. Tall letters. Rev.: normal. (Pl. I. 28)	1	
	Rough issue, St. Andrews (2 mullets of 5 points, 2 of 6)		
1846	Obv. pellet on sceptre handle; GR; cf. B. fig. 214.  Rev.: CIV/ITA/SAN/DRE (for CIVITA, cf. the St. Andrews halfpence of this issue in National Museum of Antiquities ex. R. Carlyon-Britton coll., BNJ xiv (1918), p. 226, and Stewart collection; a penny from the same obv. die as no. 1847 in Stewart collection has normal rev. reading CIVI/TAS)  (Pl. I. 29)	1	
1847	Same dies as B. fig. 219. Note A's are chevron-barred (Burns prints this feature for St. Andrews but not for Edinburgh coins of this issue, but they also appear to have it, though in a less marked form). (Pl. I. 30)	I	
	Robert Bruce, 1306-29		
1848–51	As B. fig. 225; colon stops; unbarred A. 1848 and 1849 are from same pair of dies. (Pl. I. 31-4)	4	46
	ANGLO-GALLIC—AQUITAINE		
	Edward II sterlings.		
	Hewlett, pp. 30-71, Pl. VI. 5.		
1852	Obv.: Variety c. Rev.: Variety b.	1	
1853	Obv.; EDWARD+REX AMGL**. Rev.: Variety b.	1	2
	CONTINENTAL STERLINGS		
-0/207±040	Arleux, Seigneurie		
1854	Jean de Flandre 1313–25 Chautard No. 224, Pl. XVIII. 2. Cambrai, Bishopric	1	
1855	Gui de Collemède 1296-1306 Chautard No. 216, Pl. XVII. 8. Flanders, County	1	
1856	Guy de Dampierre 1251-1305 Chautard No. 8, Pl. II. 6.	1†	
1857 1858–60	", Chautard No. 1, Pl. II. 1.  Robert de Béthune 1305-22 Chautard No. 12, Pl. III. 1, but punctuation is trefoil, not saltires.	3	
1861-5	,, as last, but one trefoil after initial R instead of two.	5	
1866–9	,, Chautard No. 14, Pl. III. 3, but punctuation is solid triangles, not annulets.	4†	
1870	Hainaut, County Jean II d'Avesnes 1280-1304 Chautard No. 38, Pl. IV. 9, Ligny, Seigneurie	1	
1871	Valéran II 1304-53 Chautard No. 237 var., Pl. XVIII. 8. Luxembourg, County	1	
1872-3	Jean l'Aveugle 1309-46 Chautard No. 186, Pl. XV. 9. Namur, County	2	
1874	Guy de Dampierre 1263–97 Chautard No. 51 var., Pl. V. 5.  Porcien, County	1	
1875-7	Gaucher de Châtillon 1303-29 Chautard No. 241, Pl. XIX. 3.	3	
1878	" " Chautard No. 242/244.	1	
	UNCERTAIN		
1879	Reads: Obv.: EDWRANGL'DNShyB	or.	
	Rev.: CIVI/SNI/CES/TIN (Pl. I. 35)	1	26
	INDECIPHERABLE FRAGMENTS		
1880-7	Amounting to at least	8	8



THE LOCH DOON TREASURE TROVE (1966)

# THE ATTENBOROUGH, NOTTS., 1966 HOARD

### MARION M. ARCHIBALD

THE hoard was discovered by Mr. H. G. Roberts while preparing a bean trench in his garden at 51 St. Mary's Close, Attenborough, Notts. (Nat. Grid Ref. SK 5185 3454), on 3 May 1966 and was declared treasure trove at an inquest held at Beeston, Notts., on 26 May 1967. The hoard of 1,102 identifiable silver coins and a few small fragments of some five or six other pence was contained in an earthenware pot along with a piece of cloth and a bronze bell. Although all the silver denominations except farthings were present,  $87\frac{1}{2}$  per cent of the total were pence. The earliest coin was a type Ic penny of Edward I and the hoard closed with pence of Henry V type F. A number of Irish, Scottish, and continental coins were also included.

### CONDITION

The coins had been protected from corrosion by their container and required only light cleaning but as half of them had been in circulation for at least sixty years and just under a quarter for almost a century many were in extremely worn condition. Not only were the earlier coins very worn but many had also been clipped. The pence of Edward I for example had lost on average a third of their original issue weight. The groats and to a lesser extent the half-groats were generally in better superficial condition than the pence of contemporaneous issues but many had been severely clipped and a few had been almost completely shorn of their outer legends. The method of clipping most frequently used, however, was not to remove an equal width of metal from the entire circumference but to slice off a broader arc from one side of the coin. Sufficient of the bold detail on the pence of Edward I and II had usually remained to enable classification into subtypes to be made. In general the appearance of the Edward III pence was worse than that of the majority of the earlier coins as their weaker detail and less accurate striking had not stood up so well to hard wear. In the case of the Richard II pence up to forty years of wear had compounded the usual difficulties caused by bad technique and worn dies. The pence of Henry V had seen little circulation but they too had been carelessly struck sometimes from very worn dies.

### CONTENT

Asterisked coins are illustrated on Pls. II and III.

### Edward I and II

The hoard contained 242 pence and four halfpence of Edward I and II and these represent 22.3 per cent of the total. Among the scarcer coins were a Durham penny of

Mr. A. G. MacCormick, Assistant Curator (Archaeology) in the Castle Museum, Nottingham.

<sup>&</sup>lt;sup>1</sup> The excavation which was conducted at the site after the discovery of the hoard and the container, cloth, and bell are discussed in the Appendix by

Bishop Bek with the cross moline in the CIVI quarter (No. 82), a Durham penny of type Xc-f second bust with the aberrant EDWARR reading of the previous subtype (No. 95), a Id/II mule of London (No. 113), and a type II halfpenny of Lincoln (No. 243). Several pence had misspelt legends and these are given in the list of contents of the hoard at the end of this paper. One base and light penny of London with blundered legends in engraved letters of unofficial style is surely a forgery (No. 242\*). The London halfpenny of type X-XI is in such exceptionally unworn condition when compared with other coins of the same date in the hoard that it must only recently have returned to use after a long period out of circulation.

### Edward III

The issues of Edward III accounted for almost half the hoard (49.4 per cent). The total of 544 coins comprised 10 groats, 55 half-groats, 456 pence, and 23 halfpence. The presence of coins of Pre-Treaty series E with the broken letters C and E (e.g. halfgroats Nos. 287-8) and also v (e.g. groat No. 254\*) made me consider whether these ought properly to be regarded as privy marks. In his study of the silver coinages of Edward III1 Mr. Potter considers that they are privy marks. In discussing the C and E his comment that 'the breaks consist of the removal of the bottom right sections of each letter'2 suggests that he views the letters C and E as having been struck on to the die by different punches. If the punches were in fact distinct then the appearance of a similar break on both would greatly increase the possibility of its being deliberate. In my opinion, however, one punch was used for both letters. An E was formed by striking a c on to the die and then adding a horizontal bar. This is proved by the fact that the bar is not always in the same position on all dies, e.g. it sometimes projects beyond the closure at the right of the letter. Hence the 'E for C' noted in this class and others of the period3 was the result of the die-maker failing to add the bar. This omission could of course have been deliberate but I think that it was much more likely to have been an accidental oversight caused by pressure of work when a large number of dies were required during a period of heavy output. Some dies made when the c punch was still intact show a weak point where the curved back of the letter meets the closure, and the 'broken letter' is a natural development from this flaw. The break has been admitted to be rough<sup>4</sup> and I should prefer to explain it not as a deliberate and ill-executed mutilation intended to serve as a privy mark but just as an accidental breakage. It is the same punch which is used in all denominations of this class where the broken letter occurs. The nicked v on the other hand appears only on the groats as they alone employed the large fount to which it belonged. The prominent flaw which this letter developed is certainly of chronological significance and provides the modern classifier of the Pre-Treaty coinage with a useful clue to the place of particular dies in the sequence of issues but I do not think that it originally had any more significance at the mint than had other broken letters whose more obviously accidental nature has never caused them to be proposed as privy marks.5

- <sup>1</sup> W. J. W. Potter, 'The Silver Coinage of Edward III from 1351 Part 1', NC 1960, pp. 137-81.
- <sup>2</sup> Loc. cit., p. 150.
- <sup>3</sup> e.g. the C/D York half-groat No. 275\*.
- 4 Potter, loc. cit., p. 150.
- 5 e.g. the type F groats where the L in London is

considered to be accidental and the C, D, E, and M in the same type are all said to be privy marks (Potter, loc, cit., p. 155). I do not deny that punches may occasionally have had their rough edges neatened before being re-used but I think that this was done without privy marking in mind.

I am, in general terms, unhappy with the idea of a system of privy marking which involved the deliberate mutilation of the letter fount and also with the practice of selecting some flawed letters among others for this purpose often on no stronger grounds than the size and apparent relative cleanness of the break. I should prefer to look for more overt marks. In this connection I draw attention to the C/D half-groat (No. 276\*) with an annulet before the reverse initial cross. It is difficult to accept that this could just be 'space filling'. Another similar instance is the pellet in the same position on the type C half-groat (No. 263\*). Less certain is the case of the type E groat with an annulet between the R and D of EDWAR°D (No. 254\*). Had this extra stop been found on one die only it would have been reasonable to suggest that it was accidental but a second obverse die of the same type has an annulet in the same position. The same mistake *can* be made twice and further confirmation of its intentional nature is required before it can confidently be said to be a control mark.

Returning to the content of the hoard two half-groats with type E obverses have the cusps irregularly fleured and also errors in the legends although they are otherwise normal (Nos. 286\* and 291\*). The hoard included one of the scarce Calais half-groats of the Treaty coinage (No. 306) and a London half-groat of the same type (No. 308\*) in abnormally fine condition for coins of the period in the hoard. Two rare issues of Durham were represented among the pence: the Treaty Transitional penny showing the remnants of the reading DORELMIE (No. 543\*) and the Treaty penny with the similarly shattered DVnELMIS (No. 557). There were three mules between the Treaty and Post-Treaty series among the pence, one of Durham (No. 635\*) and two of London (Nos. 636\* and 637\*). There were none of the rare Post-Treaty pence of London, the hoard illustrating very clearly the dominant position of the provincial mints in the output of pence. Four pence were of irregular appearance and although I had little hesitation in classing No. 469 as a forgery the exact status of Nos. 616\* and 617\* is more doubtful. I have listed them as being from 'local dies' although their condition makes it difficult to be certain that they were not in fact struck from very worn and possibly refurbished London dies. The style of No. 757\*, however, is certainly irregular and although it bears some resemblance to the local issues of Richard II its weight of 5.2 grains is so low—even allowing for the chipping—that it too must be a forgery.

### Richard II

It is not perhaps surprising that none of the rare groats and half-groats were present in a hoard which contained so few examples of those denominations. The study of the numerous pence and halfpence (171 and 25 respectively) has to a large extent confirmed the pioneer work on the detail of this series by Mr. Purvey.<sup>2</sup> The hoard has, however, brought to light a number of varieties unknown at the time of his publication.

All the pence were of the York mint except for one of the rare London coins (no. 791\*) and one of the even rarer Durham issue (No. 792\*). Among the York pence from London dies the hoard contained coins with hitherto unrecorded forms of the obverse and reverse legends in type IB (Nos. 857\* and 858\*). Six coins were struck from reverses of

and illustrated in Mr. Purvey's paper are henceforth referred to by their number in his publication prefixed by P, e.g. P. 42.

<sup>1</sup> Illustrated in Potter, loc. cit., Pl. XI, 16.

<sup>&</sup>lt;sup>2</sup> F. Purvey, 'The Pence, Halfpence and Farthings of Richard II of the Mints of London, York and Durham', *BNJ* xxxi (1962), pp. 88-108. Coins listed

type III with the enigmatic mark after TAS but unfortunately it was seldom distinct. By far the clearest was on No. 894\*. Mr. Purvey suggested that this mark might be a trefoil or preferably a sun which was adopted as a personal badge by Richard II and which we might therefore expect to find on any type III pence of the London mint if these should ever be discovered. Such a mark would be so abnormal on a London penny that I should prefer to regard the mark as being one peculiar to York and analogous to the archbishops' personal marks which appear on the pence of this mint at later periods. I do not think that what is visible on the hoard coin will bear either of Mr. Purvey's interpretations. I should prefer to return to Walters's earlier suggestion that it is a scallop shell. The scallop mark found on the gold coins presents the flutes of the shell in a way which often makes them appear as radiating lines in much the same manner as the constituent parts of the present mark. The mark on the York pence appears to show the *oreilles* of the scallop more prominently than the mark on the gold coins. However, until a really well-preserved penny showing the mark turns up its interpretation must remain uncertain.

Mr. Purvey classified the York coins from local dies according to their obverse legends but a number of coins in the hoard do not fit easily into this system. There are two coins with readings not previously noted. One, Angilfr (No. 945\*), I have placed with the group E coins on account of the appearance of the French title and the other, Angie (No. 920\*), I have placed with group B since it is in fact from the same dies as P. 44. The latter coin was read by Mr. Purvey as Angle but in another clearer coin from the same obverse die, P. 43, the L has neither a horizontal limb nor a marked serif in its place and the letter is of the same form as the I in RICARD. Coin No. 899\* was struck from the same dies as P. 42 which I think is from the same obverse as P. 39 which is listed as being different.

There is a further group of coins from the hoard which ought to be classified as group A since they read Anglie (nos. 925–8 and 926\*) but which are of a much inferior style more analogous to the coins of group C with which they are listed here. This evidence seems to support Mr. Purvey's own suggestion that although the classification by obverse legends is convenient a grouping by style may be more significant. The most important of the mules between local and London dies was No. 954\* which is the first recorded link between the local dies and type IB. It is also interesting that the hoard contained no fewer than six coins from local group F obverses with London reverses but none with local reverses, thus confirming the rarity of the Lockett specimen which had local dies on both sides.<sup>2</sup>

Mr. Purvey suggested that the local dies should be placed between his types II and III. As the local dies had pellets by the shoulders it seems likely that the first of them were prepared when this feature was—as far as the die-maker at York was aware—part of the design of the current official dies. It is difficult to accept that the local dies would have been made to a design which was known to be out of date. Further, even if the local dies were merely copying 'coins in circulation' it would have been much more likely that they would have had no pellets by the shoulders as the much commoner types IA and II were both without this feature. My own view is that the first of the local dies were prepared during or at the end of type IB before the introduction of type II.

<sup>&</sup>lt;sup>1</sup> NC 1904, p. 341.

<sup>&</sup>lt;sup>2</sup> Purvey, loc. cit., p. 94.

Mr. Purvey suggested that his late type IA and IB were struck within the period 1387–91 and could be ascribed to Archbishop Neville who was translated to St. Andrews in April 1388. My interpretation of the local dies would therefore place them at the end of Neville's tenure when he was in trouble with the Lords Appellant for his support of the king's party and just before he went to Scotland. It was in just such circumstances that the archbishop might have found himself in urgent need of coined money and without sufficient dies to produce it. Mules with later official dies can be explained as re-use of the local dies when the former were again running short.

Among the halfpence of Richard II were two previously unrecorded variants of the obverse legend, Anglie (No. 983\*) and Ang. (No. 971\*). No. 962\* is one of the rare Intermediate type IA2 with Roman Ns on the reverse3 and No. 984\* is the first recorded example of a IV/III mule. Most of the halfpence were predictably those of the common intermediate types which have the broken letters A, R, and V which I would again regard as accidental flaws, not privy marks. On the obverse of No. 971\* for example the nick is very clear on the first R but appears as a scarcely perceptible roughness on the second R. This shows that the flaw did not penetrate very deeply or evenly into the punch as one might have expected of a cut made by a chisel. When the letter was impressed with somewhat more than usual force on to the die the 'mark' was no longer obvious. The same problem arises in relation to the I, found on type IV silver and also on the contemporary gold coins, which has the right-hand bottom foot of the letter detached. While again not denying its obvious chronological utility I do not think that it was intentionally severed to provide a privy mark. The same letter I appears on the reverse of No. 894\* and here it can be seen that the lower edge of the letter has a small flaw just inside the right foot. (This state of the punch can also be seen on the gold.) A blow which put a particular strain on that part of the punch would cause it to fracture right across the foot to result in the familiar broken letter.

# Richard II-Henry IV Mules

The hoard has added two coins to the small number of mules recorded between the dies of Richard II and Henry IV.<sup>4</sup> The first is a halfpenny of London (No. 987\*) which is the only mule of this denomination so far recorded. It was struck from a very rusty obverse die of Richard II's common Intermediate type and a reverse die prepared from punches of rather large size for a halfpenny die and first used on nobles late in Henry IV's heavy coinage.<sup>5</sup> The fount could therefore have been used for halfpenny dies of the heavy coinage although it has not so far been traced on halfpence before the light coinage.<sup>6</sup> I am influenced to attribute the hoard coin provisionally to the heavy coinage because neither die has any of the symbols, in my opinion rightly, associated with the introduction of the light issue. It may seem curious at first sight that no attempt was made to adapt the obverse by obliterating Richard's name or in some other way to indicate the change in the issuing authority. The rusty state of the die may well have

<sup>1</sup> Loc. cit., p. 107.

<sup>&</sup>lt;sup>2</sup> See M. McKisack, 'The Fourteenth Century', p. 459.

<sup>&</sup>lt;sup>3</sup> The obverse die of this coin is also found paired with a reverse die of the normal type with Lombardic NS (Purvey, loc. cit., Pl. XI, 4).

<sup>4</sup> References to the publication of other mules are

given in Purvey, loc. cit., p. 103.

<sup>&</sup>lt;sup>6</sup> e.g. B.M. coin No. 1915/5/7/577, ex Morgan Evans, weight 118-8 grains.

<sup>&</sup>lt;sup>6</sup> The same letter punches were used on the different die for B.M. halfpenny No. 1914/5/17/27, ex Walters lot 260.

caused its true nature to be overlooked when dies were urgently required but it may also have been that by 1410–11 the Lancastrian regime was secure enough for the presence of the late king's name—on the halfpence at least—to have ceased to matter.

The second mule is the very rare London penny of the heavy coinage (No. 988\*) with an obverse die of Henry IV and a reverse die of Richard II. The obverse is Potter die No. 1<sup>1</sup> which has the slightly larger Henry IV fount with the prominent pointed-based G. The reverse die has the flawed I discussed above which is found consistently on late coins of Richard II but which is not found on dies prepared in the name of Henry IV.<sup>2</sup>

# Henry IV

The hoard contained seventeen pence and seven halfpence of Henry IV (inclusive of the mules discussed above). Thirteen pence were of the heavy coinage and with the exception of the mule were all of the York mint. The York pence in the hoard were struck from two obverse and two reverse dies paired in the four possible combinations; all were already represented in the British Museum collection. The fount with the rounded-based G used to prepare these dies was an earlier one than that used on the dies



Fig. 1.

of the London pence and its smaller size enabled the long form of the French title to be included in the obverse legend. The fact that new dies were promptly supplied to York at the beginning of the reign is not perhaps surprising as Archbishop Scrope had played a prominent part in the events in London connected with the abdication of Richard II and had assisted at Henry IV's coronation.

The commonest obverse (Nos. 994–9 and 1000\*) has marks above the king's left shoulder which look like 'IA'.<sup>3</sup> The 'letters' seem plausibly well formed, of similar size and apparently with serifs. The second 'letter' is unlikely to be an A as it has no bar across the top but the feature could be read as '17'. However, as there are a number of flaws in the field of these Henry IV penny dies the 'IA' is likely to be just a composite flaw which is fortuitously shaped and more prominent than most. Rare as the pence of the heavy coinage are, the hoard supports the evidence of coins surviving in modern collections that the light issue pence are even rarer. The four coins present are from two obverse and three reverse dies. The obverse die shared by Nos. 1003\* and 1004\* is of

- <sup>1</sup> W. J. W. Potter, 'The Silver Coinages of Richard II, Henry IV and Henry V', BNJ xxx (1960), pp. 124– 50.
- <sup>2</sup> I have not found this reverse paired with an obverse of Richard II. The obverse of the hoard coin is, however, from the same die as the Henry IV/Richard II mule formerly in the Raymond Carlyon-Britton

collection illustrated in Potter, loc. cit., Pl. X, 11.

<sup>3</sup> Unfortunately No. 1000\* is very rubbed at this point and so a photograph of a clearer hoard coin from the same obverse die, No. 995, is illustrated in Fig. 1. (The British Museum collection already contained four coins struck from this die.)

poor style. The hair and crown are admittedly worn but they appear to be of irregular form and the letters are curiously shaped with long disconnected serifs engraved directly on to the die. Other details are ill executed such as the annulet on the breast and the saltire stops. In all, this die does not look like an official London one and is probably a local die similar in status to those of Richard II and Henry V. Both reverses used with it appear to be London dies although No. 1004 is so double struck that it is difficult to be certain. When used with reverse No. 1003 the obverse die was relatively fresh but by the time that No. 1004 was struck it had become rusty. As both reverses are fresh it can be suggested that the form of stopping on No. 1003 was the earlier.

I have attributed all the halfpence to the heavy coinage and in doing so I have not followed the arrangement recently proposed by Mr. Purvey and Dr. Harris.¹ The first two halfpence in the hoard (Nos. 1005\* and 1006) belong to their group A and I agree in placing these coins in the heavy coinage. Their Fig. 3 is said to have N2 and their Fig. 8 to have N3 but in fact the two coins illustrated were struck from the same pair of dies. (The reverse for example has a well-marked flaw joining the I to V in CIVI.) In general, I suspect that the number of 'different' letters found in particular coinages has sometimes been exaggerated by the inclusion of distorted forms which have resulted from the way the same state of a punch has been impressed upon the dies and from variations in the appearance of a letter due to the accident of striking.

The remaining four halfpence in the hoard have the wide, rather childish-looking face which corresponds to P. and H., Fig. 7. Mr. Purvey and Dr. Harris placed all the coins with this effigy in the light coinage. The coins in the hoard weighed 9.8, 9.5, 8.5, and 8.1 grains and therefore all were above the light coinage standard of 7.5 grains and two were above even the heavy standard of 9 grains. It seems unlikely that these coins were struck during the light coinage on the grounds of weight alone, quite apart from their lack of any of the overt distinguishing marks associated with the later issue. Mr. Purvey and Dr. Harris point out that Henry IV halfpence are sometimes overweight but they are unlikely to have been so frequently and so far above the standard.

The reduction in the standard weights which took place in the reign of Henry IV has meant that more attention has been given to the individual weights of the small denominations than has been the case in other reigns and therefore there has been a tendency to overlook the range of weights in other later medieval coinages, especially the number of pieces which are over standard weight, and to overemphasize the occurrence of overweight halfpence for Henry IV. Among the eight Treaty halfpence of Edward III in the British Museum four were over the standard weight of 9 grains, one weighing 11.8 grains and therefore quite comparable to the Henry IV halfpenny mentioned above. The figures for Richard II are fifteen above out of forty-six; for Henry IV, the heavy coinage, two above out of five and the light coinage, two above out of four.<sup>2</sup> The group of halfpence with annulets by the bust which Mr. Purvey and Dr. Harris attribute to the heavy coinage were not represented in the Wyre Piddle hoard but a few words may be said about them in the context of this question of weight. The heaviest of the coins which they quote is the one illustrated in Fig. 4 which is in the British Museum.

sented, but the figures given here are being used just to point out the fact that considerable numbers of coins over standard weight are found; no conclusions on proportions are being drawn.

<sup>&</sup>lt;sup>1</sup> Seaby's Coin and Medal Bulletin, Apr. 1969, pp. 114-17.

<sup>&</sup>lt;sup>2</sup> The element of selection in a museum collection means that coins in better condition are over-repre-

Although it weighs 9.7 grains I think that its type may still be allowed to place it in the light coinage since although it is 29.3 per cent overweight we have noted the Henry IV heavy halfpenny at 11.5 grains which was 27.7 per cent overweight and the Edward III at 11.8 grains which was 33.3 per cent overweight.

To return to the halfpence in the hoard it would be more in keeping with the evidence to suggest that they had been struck during the heavy coinage, had been in circulation for some ten to fifteen years, and had survived the reduction in the standard when their heavier fellows had disappeared. Finally, the fact that the hoard contained six halfpence of Henry IV suggests that they were originally perhaps less scarce than the number in present day collections would indicate.

# Henry V

The hoard contained five groats, one half-groat, and fifty-one pence of Henry V. The type C groat without mullet (No. 1011) was scarcely worn but had been clipped round the entire circumference and weighed only 46·3 grains. The solitary London penny (No. 1017\*) is a most interesting one and it is therefore especially unfortunate that it is so double-struck. It has a rather sketchy mullet to the right of the crown and under a strong glass what might be a pellet appears at the top left of the mark. However, as there are other excrescences visible around the mark too much should not be made of this. The symbol to the left of the crown has been almost obliterated by the double striking. A further problem in relation to this coin is its very low weight of 7·5 grains, i.e. exactly half of what it ought to weigh. It may be partly but not perhaps sufficiently explained by the fact that this coin required some additional cleaning to remove patches of ferrous oxide which could have affected its weight. The double striking makes it difficult to be certain about the forms of the letters but the fount appears to be irregular. All these factors make me think that this coin is probably a contemporary forgery.

The Durham pence Nos. 1019 and 1020<sup>1</sup> share their obverse die with the coin in the British Museum illustrated by Brooke as his example of Durham type V (a).<sup>2</sup> The hoard coins show very clearly a pellet almost on top of the hair below the mullet which was not noted by Brooke.

The 47 pence from the York mint present many problems to which I hope to return at a later time. Some of the coins had been struck from such very worn obverse dies that all that remained of the type was a shadowy effigy and faint traces of a letter among the evidence of flaws and rust on the dies. The reverses were in general struck from dies in better condition but as the coins were badly struck on ill-shaped blanks the difficulties which they present are hardly any the less. The obverse dies in the worst condition were most frequently London ones. Coins from worn local dies could usually be recognized at once by the outsize annulet, traces of which rarely disappeared completely. Generally London and local dies were paired together, although in some cases it was difficult to be certain of the status of the reverse die as so little of the lettering was visible. One certain mule is No. 1063\* from a rusty London obverse die and a fresh local reverse. Although I have given its reverse the benefit of the doubt in the list, the trefoil-overmullet penny (No. 1064\*) is perhaps another London/local mule.

<sup>&</sup>lt;sup>1</sup> No. 1020 is illustrated Fig. 1.

<sup>&</sup>lt;sup>2</sup> G. C. Brooke, 'Privy Marks in the Reign of Henry V', NC 1930, pp. 44-87.

It is curious that there were none of the fairly plentiful halfpence of Henry V in a hoard which was buried towards the end of his reign and which contained seven of the scarce coins of his father. The shortage of small change may have resulted in new issues of halfpence being concentrated in the main commercial centres and being slower to reach all parts of the country.

### Ireland

The two Irish pence (Nos. 1082–3) belonged to the common 2nd issue of Edward I and, although both were worn, they were somewhat above the average weight of the English pence of the same date in the hoard.

### Scotland

The hoard contained nine Scottish pence and seven halfpence. Among the most interesting were the rare Robert III pence and halfpence whose obverse varieties are given in the list. One halfpenny (No. 1080\*) was of the first issue of the heavy coinage and among the five coins of the second issue was one of the very rare halfpence of the Perth mint (No. 1081). Although several English hoards have contained Scottish groats of Robert II and III and one, Skipton, contained pence of Robert III, Attenborough is the first to include halfpence of either ruler.

The difficulty in obtaining halfpence which was often a matter of complaint in the various petitions to Parliament in the late fourteenth century probably accounts for the presence of this comparatively large number of Scottish halfpence. Although it was laid down in 1390 that Scottish coins were to pass current in England at only half their face value, the absence of any English farthings from this hoard supports the impression given by the petitions that, despite the officially accepted rate, Scottish halfpence were used in day-to-day transactions at face value.

### Continental

The seventeen continental sterlings were types already familiar from Edwardian hoards except for the sterling of Arnold d'Orey of Rummen (No. 1098) which I have not been able to trace in any previous English find. No. 1087\* is one of the Ligny pieces imitating the Irish sterling type which are now thought to have been struck by Valeran I not Valeran II.<sup>2</sup>

#### DATE OF DEPOSITION

The latest coins in the hoard are type VIII pence of Henry V. The last type of the reign, with the characteristic hollow-necked effigy, was not present and therefore the hoard may be dated to c. 1420. There seems to be no reason why a small bronze bell was buried with the coins and I wonder if the owner put it on top of his hoard in some kind of superstitious belief that it would warn him if anyone tried to disturb it.

<sup>1</sup> The seven Scottish halfpence represent 10·6 per cent of the total of the halfpence in the hoard. The Commons in 1402 specifically mention 'Maill d'Escoce' among the foreign coins which people were forced to use in default of English halfpence. (P. Spufford, *BNJ* xxxii (1963), p. 133.)

<sup>2</sup> On p. 80 of SNC 1962 Mr. Dolley has suggested

that at least one sterling given by Chautard to Valeran II could as well be of Valeran I, In advance of his study of Continental imitations of the Anglo-Irish series generally he agrees with the suggestion that the same could be true of the coin in the Attenborough find

### DISPOSITION

Coins marked by an asterisk in the list have been acquired by the British Museum and those with a dagger by the Castle Museum, Nottingham. The finder was rewarded in full for these coins and the remainder of the coins were returned to him in lieu of reward. A complete photographic record of the hoard was made at an early stage of the sort and is available for consultation in the British Museum.

### CURRENCY ASPECTS

# Numerical proportions

The 1,102 identifiable coins in the hoard comprised 15 groats, 56 half-groats, 965 pence, and 66 halfpence.¹ The proportion of pence is unusually high in so large and comparatively valuable a hoard.² Such a content would usually, and in this case I think rightly, be taken as an indication that the hoard was a 'currency' one but, as so few hoards of this period have been recovered and published in any detail, estimates of the extent to which savings or selection played a part in the composition of a particular hoard are largely subjective. The relative importance of factors such as geographical position, the status of the owner, and the particular circumstances of the hoard's acquisition and concealment—all of which could have had a decisive influence on its composition—are at the moment impossible to assess. In the case of the present hoard the proportional representation of the different issues and their weights, which are discussed below, makes it very probable that the coins were abstracted from currency towards the end of the reign of Henry V. The individual circumstances or trade of its owner could have been such that he had immediate access to fewer large denominations than were generally available in local currency.

The proportional representation of the types, mints, and nationalities among the pence of the Edward I-II period are as follows:

							MI	VTS							
Bris	Bury	v Ca	nt C	hes	Durh	Exet	Hull	L	inc	Lond	New	Yo	rk (	Incert	False
4.1	3.0	25.	1 0	4	10.9	**	(8/8)	1	•7	49.8	0.4	3.	8	0.4	0.4
							TY	PES							
I	II	III	IV	V	VI	VII	VIII	1X	X	XI	XII	XПI	XIV	XV	19
0.4	5.0	16.5	12.0	1.2			0.4	6.6	44.2	6.2	500	2-5	3.3	1.2	0-4
						NATIO	NALIT	IES T	0 132	7					

English Irish Scottish Continental 93·5 0·8 1·5 4·2

The absence of the short-lived mints of Exeter and Hull is not perhaps surprising in this relatively small population. The proportions of the different mints and types are predictably similar to those found in hoards buried in the mid and late fourteenth century for, once established, the proportions would in normal circumstances remain constant

at even the lowest multiplying factor must represent in the region of £150-£200 in today's terms.

<sup>&</sup>lt;sup>1</sup> Scottish and continental coins are taken at face value for these calculations.

<sup>2</sup> The face value of the hoard was £4, 17s, 7d, which

for as long as the coins remained in circulation. The numbers of Irish and Scottish coins struck before 1327 are within the normal range found in earlier hoards but the early continental element is rather larger than usual. This may again be purely fortuitous but some additional continental sterlings struck before 1327 may have come into England along with the coins of John the Blind and his contemporaries during the reign of Edward III. Fig. 2 shows, expressed as a percentage of the total number of English pence, the number of pence from each reign present in a selection of later medieval hoards.<sup>1</sup>

PROPOR	TIONS	OF ENGLISH	PENCE

	Date of	E	I-11	E	III	R	II	H	W.	H	V	H	VI	E	IV
Hoard	deposit	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Durham (1930)	1361	166	40	248	60										
Coventry (1967)	1363	47	381	75	61										
Skipton (1949)	1400 +	71	25	153	53	56	20	5	2						
Attenborough (1966)	1420	242	26	456	481	171	184	17	1 1	51	54				
Terrington (1940)	1425	5	21	98	531	8	4	S-1	-2	65	354	7	4		
Wyre Piddle (1967)	1468	2	5	7	171	2	5	1	24	8	21	17	45	1	21
Bootham No. 1 (1896)	1480 ÷	No pe	nce bef	ore Her	iry V re	corded									

Fig. 2.

If any element of selectivity was involved, the proportion of earlier coins is likely to be smaller not greater and therefore the survival ratios obtained from hoards may be regarded as minimum figures for the composition of day-to-day currency. (Figures for the later groups of coins in each hoard vary with individual circumstances but are included for completeness.) The extent to which the common coins of the first three Edwards dominated the pence in circulation until the middle of the fifteenth century is clearly demonstrated. The archaeological implications of this are most important. It means for example that a penny found on a floor level of 1420 could have a 25 per cent chance of having been struck before 1327 and a 70 per cent chance of having been struck before 1377.2 In the case of levels of unknown date the corollary is not of course applicable but it is necessary that the coin evidence from later medieval sites is carefully evaluated or grave errors of dating could result. If such currency patterns could be refined they would be of value not only to archaeologists but to students of the coinage who wish to establish the possible hoard provenance of unpedigreed coins. In this connection it is important to determine how far weight is a reliable guide to the date at which coins were current.

### Weight

As the coins in the hoard had required little cleaning the weights obtained after this had been done, and which are given in the list of the contents, are only very marginally lower than those at which the coins were withdrawn from circulation and may therefore

Henry V but one cannot be certain that some coins from the common issues of Edward III and Richard II were not also included.

Adequately recorded hoards with large numbers of pence are not easy to find for the later medieval period and therefore it is not claimed that those chosen are truly representative. As in the case of Bootham one all too often finds at the end of the list of contents, 'Illegible York pennies, 44'. These might well be of

<sup>2</sup> The factors affecting the composition of hoards will influence these figures.

be used with confidence as their current weights in 1420.<sup>1</sup> At an early stage in sorting a quick check was made on the average weights of the major groups in the hoard by weighing in bulk round numbers of coins. In the list below the number of coins weighed is given in brackets after the reign.

Edward I and II	(200)	14.9 grains
Edward III	(400)	14.6 ,,
Richard II	(140)	14.8 ,,
Henry IV Heavy	(13)	15.9 ,,
Henry IV Light	(4)	14.6 ,,
Henry V	(50)	14.1 ,,

The standard weight of the penny at the date of the hoard's deposition was 15 grains and, with the exception of the heavy coinage pence of Henry IV, all the issues were seen to average at just under the current issue weight regardless of the standard at which they had originally been struck. The figures suggested that this aspect of the hoard ought to be investigated in greater detail and so the individual weights of the pence in the major issues of the period covered by the hoard are set out as histograms in Fig. 3.2 They show that although the average weights of the various issues (except the Henry IV heavy coinage) are just under the current standard, the range is a wide one and 44.3 per cent of the coins are above it. Even among the recently issued coins of Henry V, 31 per cent were overweight. To test whether this was likely to be a normal figure for coins when issued in the later medieval period<sup>3</sup> the weights of the latest coins—Pre-Treaty type G pence—from the Durham (1930) hoard in the British Museum were treated in the same way and the result is shown in Fig. 4. Although coins in the National Collection are in above average condition the selectivity factor is not of much importance when the latest coins from a find are being considered. The figure of 24 per cent overweight may therefore be taken as an acceptable minimum for the latest coins in the Durham find. The pattern for coins surviving from heavier issues was compared with the weights of pence of Edward I and II in the Coventry (1967) hoard<sup>4</sup> which was buried c. 1363 during the 18-grain standard. The distribution was a similar one with the peak again just below the then current weight. The average weight of the heavy pence of Henry IV was higher than that of the other issues but the individual coins were tending to peak towards the new and not the old standard. As the heavy pence of Henry IV had not been in circulation very long before the reduction in weight, they had not had so much time to develop the 'tail' of worn coins which had brought down the averages of the previous issues. The halfpence are set out in the same way in Fig. 5. Although there are more heavy coins than among the pence the same tendency towards peaking on the current weight is evident with the exception, for the same reasons, of Henry IV. The conclusion which may be drawn from these figures is that old pence<sup>5</sup> which remained in circulation

suggests that the weight of pence at issue in c. 1308-9 was much more accurately centred on the standard weight.

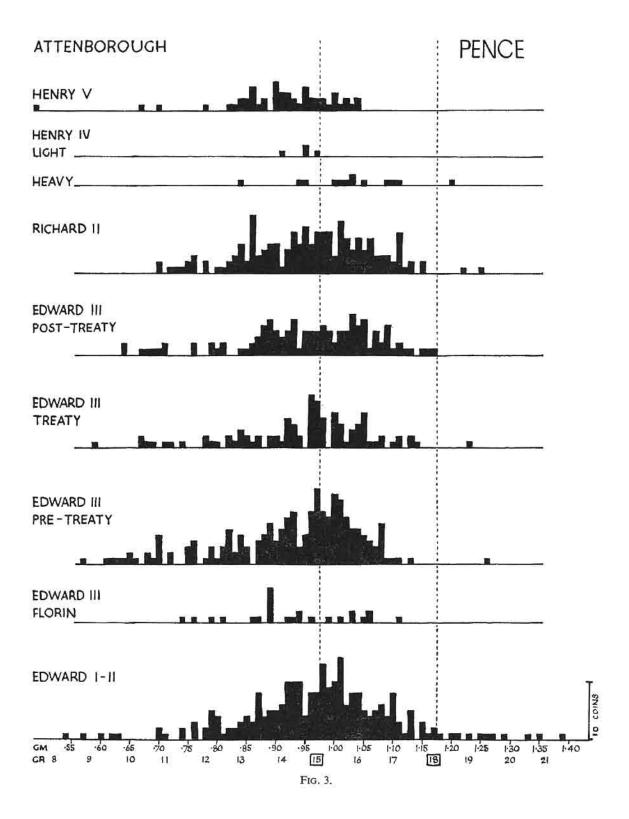
<sup>&</sup>lt;sup>1</sup> The coins were weighed in grammes which were then converted into grains, the lower figure being taken where there were alternatives.

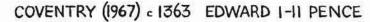
<sup>&</sup>lt;sup>2</sup> The weight range of the coins from local dies was predictably the same as for those from London dies and so the histograms for Richard II and Henry V include both groups.

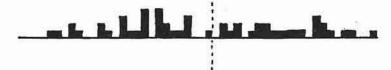
<sup>&</sup>lt;sup>a</sup> The Mayfield (Sussex) 1968 hoard which will be published in the Albert Baldwin memorial volume

<sup>4</sup> To be published in the next volume of this Journal.

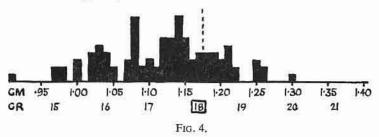
b I want to emphasize that these figures are for pence. It is possible that the larger denominations did not behave in quite the same way. The gold especially will require special consideration. See 'The Fishpool Hoard', NC 1967.

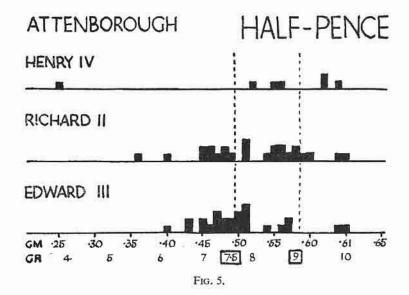






# DURHAM (1930) 1361 EDWARD III PRE-TREATY G





after a reduction in standard weight need not individually have been worn or clipped down to or below it. About 45 per cent of them were overweight in this hoard even after eight years.

The individual weight of a worn penny is unlikely to be a reliable guide to the date at which it was withdrawn from circulation but as the size of the sample increases the average weight is a fair indication of the standard weight at the time of its deposition. Unless this hoard was selective, the picture which it presents of the early fifteenth-century coinage is rather different from the conventional one. The king's money was certainly

in very worn and clipped condition, but unless payments were made in deliberately selected low-weight coin his subjects would appear to have received pretty nearly standard value in all but the smallest sums. There is also little evidence that the melting and clipping of overweight pence was as widespread as is sometimes suggested. Perhaps in addition to the deterring penalties, the large amounts which would need to have been handled before it would have been worth the risk involved and the difficulty which the ordinary man would have found in disposing of the bullion also worked against these malpractices. Any estimate of how far these patterns are typical will have to await future work on weight distributions.

#### LIST OF CONTENTS

# EDWARD I-II

#### Pence

	Berwick			
			13.6	
1	IIIb		13.6	1
2	IVa or b		15:1	1
3	IVb		14·2(†)	1
	Bristol			
4-5	IIb		15.4, 15.9	2
6	IIIb		14.9	1
7-10	IIIc		15.3, 14.5, 13.1, 11.8	4
11–13	$\mathbf{III}d$		16.6, 15.9, 15.4	3
	Bury St. E	Edmunds		
14	IVe	EDMVDI	14-2(†)	1
15	Xb		12.6	1
16	Xc-f	Bust 2	12.5	1
17	Xc-f	Bust 2 hyp:	15-1	1
18	Xc-f	Bust uncertain	13.4(*)	1
19	XIa	v over c in vIL	14.6	1
20	XIII	Early	17.4	1
	Canterbury	V		
21	IIb		15.6	1
22	$\Pi b$		12.2	î
23	IIIc		12.1	
24	IIId		16-9	1
25	IIIg		15.4	1
26	IVb		12.4	î
27	IVc	Reverse a barred	14.0	1
28-30	IVd	E and .CIVI	14.6, 13.4, 10.9	3
31-2	IVe	in and iditi	17-1, 14-9	2
33	ÎV	Subtype uncertain	13.7	1
34	Va/IVe	Salety pe amountain	14.1	î
35-6	IXa	With * on breast	17.9, 15.6	1 1 3 2 1 1 2 2 1 2 2 8
37-8	IXb	?? on breast	14.9, 12.6	2
39	Xa	on breast	14.8	1
40-1	Xb	1st with accidental, after CAN	17.4, 13.7	2
42-3	Xc-f	Bust 1	14.5, 13.6	2
44-51	Xc-f	Bust 2	18.5, 16.9, 16.5, 16.4, 15.4, 15.3, 14.9, 13.4	8
52	Xc-f	Crown 3 hair 2	16.5, 16.9, 16.9, 16.4, 13.4, 13.5, 14.9, 13.4	1
53-61	Xc-f	Bust 2 or 3	16.6, 16.2, 16.1 (2), 15.4, 14.5, 14.4, 13.9, 12.9	9
62	Xc-f	Late transitional—straight-sided		1
63	Xc-f/XI	Bust 3	14.3	1
55	AC-JIM	Dust J	143	•

		THE ATTENBOROU	GH, NOTTS., 1966 HOARD	65
64–9	XIb		16.8, 16.7, 15.7, 15.6, 14.5, 11.4	6
70–3	XIII	Early One with pellet or		4
74	XIII	Late	15.2 15.1 (2) 14.5	1 5
75–9 80	XIV XVb	Early	15·3, 15·1 (3), 14·5 15·6	1
00			150	
	Chester		10.0	
81	$\Pi I g$		19-9	1
	Durham			
82	IVb	Bishop Bek. Cross moline	in civi quarter 16.6(*)	1
83	IVb	Bishop Bek. Cross moline		1
84–6	Xc-f	Bust 2 Bishop Bek	18.2, 15.6, 12.9	3
87–94	Xc-f	Bust 2 King's Receiver	19.6, 16.5, 16.4 (2), 16.2, 15.1, 13.4, 12.8	8
95	Xc-f	Bust 2 King's Receiver ED Bust 3 Bishop Bek	14·9(†) 16·3, 15·6, 15·1, 13·9	1
96–9 100–1	Xc-f Xc-f	Bust uncertain Bishop Be		2
102-3	XIb	Bishop Kellawe	15-3, 14-5	2 2 1
104	XIb	Bishop Kellawe DVNELME	14.5	1
105-6	XVb	Bishop Beaumont	13.4 (2)	2
107	Uncertain	Durham ////еме ? Class X	8.8	1
	Lincoln			
108	IIIc		11.7	1
109-10	IIId		15.6, 14.1	2
111	ш	Subtype uncertain c or d	15.4	1
	London			
112	Ic		15.1	1
113	Id/II		14.8(*)	1
114-15	IIa		15.1, 14.8	2
116	IIa	EDWREANGL	16.9(*)	1
117-19	IIb		19.4, 15.1, 13.7	3
120	IIIa		14.3	1
121	IIIb	Topolitical Hard of L.	14·2 rapery of <i>c</i> 15·9	1 1
122 123-4	IIIb-c IIIc	Transitional Head of b, d	16·6, 13·2	
125-6	IIIc or d		15.7, 14.1	2 2 4
127-30	Шd		17.7, 16.1, 14.3, 14.2	4
131	IIIg		14.9	1
132-3	III	Subtype uncertain	14.6, 12.2	2
134-6	IVa		15.6, 14.2, 13.1	3
137-8	IVb		15·6, 14·4 16·1 (2), 12·9, 12·3, 11·8	5
139-43	IVc IV	Subtype uncertain a-c	13.2, 8.3	2
144–5 146–7	IV <i>d</i>	.EDW	14.3, 14.2	2 3 2 5 2 2
148	IVd	.EDW .CIVI	13.7	1
149	IVe	Control of the state of the sta	12-8	1
150	Va		11.4	1
151	Vb		15:1	1
152	VIII	25	13·6 20·5	1
153	IXa	* on breast	19.3, 18.6, 18.1, 17.7, 15.5, 14.9	6
154-9	IXb	* on breast Without *	17.4, 15.6, 14.3, 14.2	4
160-3 164	Xa/IX	LOIDIII	14·3(*)	1
165-6	Xb/IX	LUIDIII	20.8, 13.4	2
167	Xa		15:9	1
168-9	Xb		13.7, 12.2	2
170-82	Xc-f	Bust 1	17.1, 16.6, 16.5, 16.2, 15.7, 15.3, 15.2, 14.8 (2), 14.6,	12
102 00	V	Post 2	13-9, 13-6, 13-1 21-4, 17-7, 16-9, 16-5, 16-2, 16-1, 15-7 (2), 15-1 (2), 13-9,	13
183–96	Xc-f	Bust 2	13.1, 12.1, 10.8	14
			The contract of the contract o	

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66		THE ATTENBOROUGH, NOTTS., 1966 HOARD	í
197-209	Xc-f	Bust 3 18·1, 17·4, 17·3, 17·1, 16·9, 16·8	. 16-1 (2), 15-4, 15-3,
T			14.8, 14.2, 12.3
210	Xc-f	Bust 3 hyb'	16.9
211-20	Xc-f	Bust 2 or 3 15·3, 14·5, 14·4 (2), 14·2 (2),	
221-2	Xc-f	Late Transitional—straight-sided letters on obv.	16.9, 15.1
223	XIa		14.5
224-6	XIb	15	16.8, 14.9, 14.1
227	XIb	hyB:	15.9
228 229–30	XIV	Early	15.7
229-30	XIV Newcastle	Late	15.6, 14.6
231	IXb		16.2
231	York		10 2
232-3	IIb	Royal	14.5, 9.5
234-8	IIIc		, 14.8 (2), 13.2, 12.2
239	IIIe	Archiepiscopal Quatrefoil on breast	12.3(*)
240	IIIf	Royal Lombardic n	15.3
75 (1.5%)	1000 E	- TO TOTAL THE COLUMN AND REPORT OF THE COLUMN TO THE COLU	
	Uncertain 1	Mint	
241	Xc-f		10.8
242	<i>FORGERY</i>	London Class III	9.7(*)
		Half-pence	
9.00	Lincoln		
243	IIIc	LINCOL' 0302c	6.9
Salaro Sa	London		0.50
244	IIIc	0302a	7.1
245	IIIe		8.8(†)
246	X-XI	EDWARDVS REX A Bifoliate 0602	10.1(*)
		EDWARD III	
	2	Groats	
Pre-Treaty	Coinage		
	London		
	C	All cusps fleured a with hooked right limb	
247		O DEI//////R AUGLODONYB (2) POSVIO ODEVMOA DIVTOR EMOMEVO	50.1
248	LDWALL	////////D°G°REX°A (2) ////VI ////// ///// EM°MEV	201
2.10		Almost all legend cut off	51.8
249		Obv. illeg. Rev. as previous	51.8
	E	No fleurs over crown	
	=5:	Rev.: + POSVI DEVMOA DIVTOR EMOMEV unless stated	
250		///////G°REX°AHGL'OTOFRAHCODOHYB	R (3) V (2) 62.6(*)
251		+EDWA//////EXOAIIG TOFRAIICODOHYB R(4) V(3) +POSVIO	57.8(†)
252	+EDWRD//	$D^{\circ}G^{\circ}REX^{\circ}AIIGL^{\circ}T^{\circ}FRA(?L)II///R(4) V(3)$	
		Only bases of first part of legend visible	53.8(*)
253		FRAIICODHYB 'Square E' in EDW R(4) V(3) ODEVMOA	55-2
254	+EDWAR <sup>o</sup> D	"OD"OG"OREX"AIIGL"O TOFRA ///// R(4) V(3)	57-8(*)
255	Ga	All cusps fleured	0 0230a
		+ED////////////////////////////////////	in civi quarter 54.6
		TON DON	
	York		
256	E/D	+EDWARD°D° //////X°AIIGL° T°FRAIIC°D°hYB (2) +POSVI°	51.5 (†)
		R (2) both sides	
	Day Trans	Half-groats	
	Pre-Treaty	Comage	
	London	NAME OF THE PART O	
	London C	All cusps fleured	
257-8		All cusps fleured + EDWARDVSOREXOAUGLIOGOFRAUCI + POS VIODEVO OADIVT OREM	32.7, 30.7

		THE ATTENBOROUGH, NOTTS., 1966 HOARD		67
259-60		+EDWARDVSOREXOAUGLIO TOFRAUC		
232.00		+ POS VIODEV ADIVT OR/////	27.4, 32.7	2
261		End of obv. legend illeg.		
		/////// VIDEV ADIVT OREM	32.8	1
262		End of obv. legend illeg. prob. FRAUCI		
		+ POSV IODEVMO OADIVT OREM	30.1(*)	1
263		+EDWAR/////////AUGLIO TOFRAUCI		
		*+POS VI°DEV° ADIVT OREM	22.5(*)	1
		No fleurs on cusps over crown		
264		+ED/////vs°rex°augli° 3//////Ci		
		////// VIDEV ADIVT ///////	27.4	1
265		Same except FRAUC'o		
		+POS VIODEVO OADIVT OREM	25.6	1
266		Same except FRANC'		
		+POS VIODEVO ADIVT OREM	31.9	1
267-9		Same except FRAUC		
222		Same rev. as previous	32.4, 31.8, 28.8	3
270		Same as previous	AA -	2
071 0		+P///// /////v° °ADIVT OREM	28.5	1
271-2		Same as previous	20.0.00.0	~
072		Details of rev. stops illeg.	32.2, 26.2	2
273		End of obv. legend illeg.  + POS VIDEV ADVIT OREM	30.2	1
274			30-2	
214		Same except fracti Same as previous	33.3	1
		Same as previous	33.3	÷
		No fleurs on cusps over crown		
275	C/D	+EDWARDVS°REX° AUGLI° T°FRACI	2200220	52
		+POS VIDCV ADIVT ORCM	33°6(*)	1
276		+EDWARDVS REX AUGLI FRAUC	24 4/45	
077		"+POS "VI" DEV ADIVT OREM	34.4(*)	1
277		End of obv. legend illeg.	31.6	1
		+POS VIDEV ADIVT /////M	31.0	ž.
	5540500	All cusps fleured		
278	D/C	+E ///////// Ll <sup>o</sup> T <sup>o</sup> FRACI	5492	2
		+ POS VIDEV ADIVT OREM	31.8	1
		No fleurs on cusps over crown henceforth		
279	D	+ED/////DVS°REX°A///////FRACI		
		/////VIDEVO ADIVT ORE////	31.6	1
280		Same as previous		
		Same except VIDEV	20.8	1
281		+EDW//////// °AIIGLI° T°FRA*		
	-	+POS VID////// //// OREM	30.5	1
282-3	D/E	+EDWARDVS°REX°AIIGLI° 7°FRACI°		
		+ POS VIDEV ADIVT OREM	20.7.06.7	-
201		Two coins from same pair of dies	32.7, 25.7	2
284 285		Same except FRACI Same except VI°DEV°	25·4 32·1	1
286	E/D	+EDWARDV ///// AliGil.º 7ºFRACI Broken E	52.1	T.
200	20,20	No fleurs on cusps by hair		
*		+ POS VIODEV ADIVT OREM	30.5(*)	1
287	E	+EDWARDVS°REX°AIIGL° T°FRACI		79
07000	P90	+POS VIO DEV ADIVT OREM	31.8	1
288		Same except vi°DEv°	24.7	1
289-90		Same except reverse stops illeg.	26.2, 26.1	2
291		+EDVARDVSOR///////IGL/////AIIC Broken E	motor Wittration	
27		+pos videv adivt orem		
		Only five cusps fleured		
		No fleur to right of hair or left of crown	35.3(*)	1

68		THE ATTENBOROUGH, NOTTS., 1966 HOAR	RD	
292	F	Crown EDWARDVSOREXOAUGLOTOFRACI		
	100	,, POS VIODEVO ADIVT O/////	24.7	1
293		,, EDWA//////orexoaiiglio-to-fra		
		,, Same as previous	32-8	1
294	Ga	Almost all legend cut off (2) o below bust		
222	0 10	////// VIDEVO ADIVT OR///// (2) o in CIVI quarter	24.7	1
295	Ga/f	////dwardvs°REX°AИGL'°FRAИ (2) o below bust	25.7	
206	Gb/f	+ POS VI°DEV °ADIVT OREM (2) T.A.S + EDWARDVS°REX°AUGL° T°FRACI	25.7	1
296	Goff	Nothing below bust		
		Same as previous	32.7	1
	York	banic as providas		
207	E/D	1 EDITION DIVISION PROPERTY OF THE PROPERTY OF		
297	EID	+EDWARDVS°REX°AIIGLI° T°FRACI + on breast +POS VIDEV° ADIVT OREM	32.9	1
298-9	Е	+ EDWARDVS°REX°AIIGLI° 7°FRACI Nothing on breast	267	-
270 7	150	+ POS VIDEV ADIVT OREM	32.8, 26.1	2
300		Same as previous but ? + on breast	27.1	1
301-2		Same as previous but end of obv. legend illeg.	32.2(†), 26.7	2
303		Same except VI°DEV°	27.0	1
304	E	FRACI obverse	121343	521
		Rev. stops illeg.	26.1	1
305		+EDWARDVS°REX°A//////I°	29.8	1
		Rev. stops illeg.	29.0	1
	Treaty Co	pinage		
		All cusps fleured		
	Calais			
306	Culturo	/////// RDVsoREXOANGL'oDns //// o on breast		
		+ POSV I DEVM *ADIVTO R.E MEV		
		VIL LA.C ALE SIE	5.05007 to \$V4517	
		Same dies as B,M. coin 1935/4/1/2844	26·2(†)	1
	London			
307-8		+EDWARDVS&REX&ANGL&DNS&hyB' No annulet before EDW		
220		+POSV I*DEVM *ADIVTO RE*MEV	33.1, 32.4(*)	2
309		+°EDWARDVS&REX&ANGL&DNS&hyB	31.9(†)	1
	Post Trea	ty Coinage		
	London			
310		+EDWARDVS#RE//////GL'x 7xFRANC' No pellets by crown		
		+POSVI DEVM × A DIVTOR EM × MEV LOW DOW	34.5(*)	1
		All cusps fleured Small face		
311		Same except FRANC's Pellets by fleur of crown		
		Same except ме⊽ .civi таs .loи рои		
		No fleurs on cusps over crown Large head		
		Same obv. die as B.M. coin 1913/6/13/3		
		Rev. die different but same readings	35.5	1
	Pence			
	Florin Co	ingga		
		mage		
212	Durham		14.8	1
312	A	EDW R ANGL DIS YB/CIVI TAS DVn OLM	14.0	1
313-16	London I/I		16.3, 16.2, 15.3, 13.7	4
317–18	I/II		13.7, 13.2	2
319	I/III		16.3(*)	1
320-1	2/I		14.5, 13.9	2
322-4	2/11		15.9, 14.5, 13.4	3
325	3/11	The same of the sa	15.6	1
326-30	4/I	14·3,	14·2(†), 13·7, 12·2, 11·4 13·7	1
331	?/I			

17.4, 15.3 (2), 14.6, 11.8

5

1

8.8 1

16.1

463-7

468

469

Subtype uncertain

FORGERY Pre-Treaty type Ga annulet on breast

Pre-Treaty type uncertain

475-6 E Royal AIGLI® 149, 141, 12-6  475-6 E Royal AIGLI® AIGLI® 157, 15-4  477 AIGCL® FRA 129(f)  478 AIGCL® FRA 129(f)  479 AII coins are Archiepiscopal henceforth  480-2 Gd AIGCL® 1 16-5, 15-7 (2), 13-9, 13-7, 11-5  489 Obverse legend ending uncertain 16-5, 15-7 (2), 13-9, 13-7, 11-5  490-2 Gg AIGLL® 1 16-5, 15-6, 11-5  490-2 Gg AIGLL® 1 16-6 (2)  493-4 AIGCL® 1 16-6 (2)  493-7 AIGCL® 1 16-7, 15-9, 15-1, 14-9  498-505 Obverse legend ending uncertain 16-5, 15-6, 15-3, 14-9 (2), 14-3, 14-1, 13-6  506-9 Gd or f  510-12 Gf or g  510-12 Gf or g  513-14 Gd-g  515-26 G Subtype uncertain 16-6, 16-2, 15-6, 15-3, 14-9 (2), 14-3, 14-2, 12-6  515-26 G Subtype uncertain 16-6, 16-2, 15-6, 15-3, 15-1, 14-9, 14-5, 13-9, 13-5 (2), 12-9  513-14 Gd-g  513-14 Gd-g  515-26 G Subtype uncertain 16-6, 16-2, 15-6, 15-3, 15-1, 14-9, 14-5, 13-9, 13-5 (2), 13-7  527-42 Pre-Treaty York subtype uncertain 16-6 (2), 15-6, 15-3, 15-1, 14-9, 14-5, 13-9, 13-5 (2), 13-7  527-42 Pre-Treaty York subtype uncertain 16-6 (2), 15-6, 15-3, 15-1, 14-9, 14-5, 13-9, 13-5 (2), 13-7  527-42 Pre-Treaty York subtype uncertain 16-6 (2), 15-6, 15-3, 15-1, 14-9, 14-5, 13-9, 13-5 (2), 13-7  527-42 Pre-Treaty York subtype uncertain 16-6 (2), 15-6, 15-3, 15-1, 14-9, 14-5, 13-9, 13-5 (2), 13-7  527-42 Pre-Treaty York subtype uncertain 16-6 (2), 15-6, 15-3, 15-1, 14-9, 14-5, 13-9, 13-5 (2), 13-7  527-42 Pre-Treaty Coinage—Transitional  Durham  548  549  540  541  542  545  544  545  547  548  549  549  540  541  541  542  545  545  540  541  541  542  545  545  546  547  547  548  549  549  549  540  541  541  542  543  544  545  545  546  547  547  548  548  549  549  540  541  541  542  545  547  548  548  549  540  541  541  542  543  544  545  545  547  548  548  548  549  540  541  541  541  542  543  544  545  545  547  547  548  548  548	70		THE ATTENBOROUGH	, NOTTS., 1966 HOARD	
475-6		York			
Copal   AIGLL*9   14-9, 14-1, 12-6	470-1		A STATE OF THE STA	15.4, 13.9	2
475-6 E Royal AIGGL***PFRA 12.9(f) 477 AIGGL*** SPRA 12.9(f) 478 AIGGL*** 10.9 479 AIGGL*** 10.9 480-2 Gd AIGGL** 15-7, 15-6, 11-5 483-8 Gf AIGGL** 16-5, 15-7 (2), 13-9, 13-7, 11-5 489-2 Gg AIGGL** 16-6, 16-2, 15-6, 15-3, 14-9 (2), 14-3, 14-1, 13-6 490-2 Gg AIGGL** 16-6, 16-2, 15-6, 15-3, 14-9 (2), 14-3, 14-1, 13-6 498-505 Obverse legend ending uncertain 16-5, 15-6, 15-3, 14-9 (2), 14-3, 14-1, 13-6 506-9 Gd or f 15-12 Gf or g 15-14-9, 15-6, 14-9 513-14 Gd-**	472-4			92-4720/75-972 - 972756	-
One from same dies as B.M. coin  AIGGLa**PERA  AIGGLA**PERA  AIGGLA**  AIGGL				14.9, 14.1, 12.6	3
### AIIGLE**PERA ### 12.9(ft) ### AIIGLE** 10.9  ### AIIGLE** 10.57, 15-6, 11-5  ### AIIGLE** 16-5, 15-7 (2), 13-9, 13-7, 11-5  ### AIIGLE** 16-6, 15-7, 15-6, 11-5  ### AIIGLE** 16-7, 15-6, 11-5  ### AIIGLE** 16-7, 15-6, 11-5  ### AIIGLE** 16-7, 15-7, 15-6, 11-5  ### AIIGLE** 16-7, 15-7, 15-6, 11-5  ### AIIGLE** 16-7, 15-7,	4/5-6	E Royal		ooin 15.7 15.4	•
### AIGLIP* 10-9  ### AIGLIP* 10-9  ### AIGLIP* 10-9  ### AIC coins are Archiepiscopal henceforth  ### AIC coins are Archiepiscopal feld of Coins are	477				2
AII coins are Archiepiscopal henceforth   AII coins are Archiepiscopal henceforth					1
All coins are Archiepiscopal henceforth  480-2 Gd AIGGL/					î
#80-2 Gd AIGLI/      15-7, 15-6, 11-5   #83-8 Gf AIGLL-3" 16-5, 15-7 (2), 13-9, 13-7, 11-5   #89	412	All coins a	A STATE OF THE STA	107	•
483-8	480-2			15.7, 15.6, 11.5	3
489					6
498-505	489		Obverse legend ending uncert		1
498-505   Obverse legend ending uncertain   16·5, 15·6, 15·3, 14·9 (2), 14·3, 14·1, 13·6   150-12   Gf or g   15·1 (2), 12·9   15·1 (2), 12·9   15·1 (2), 12·9   15·5, 14·6   15·5, 16·6   15·5, 16·6   15·5, 16·6   15·5, 16·6   15·5, 16·6   15·5, 16·6   15·5, 16·6   15·5, 16·6   15·5, 16·6   15·5, 16·6   15·5, 16·6   15·5, 16·6   15·5, 16·6   15·5, 16·6   15·5, 16·6   15·5, 16·6   15·5, 16·6   15·5, 15·5, 15·1, 14·3, 14·2 (2), 13·7, 10·2   13·1, 10·2   17·6   17·6, 15·3, 15·1, 14·9, 14·5, 13·9, 13·5 (2), 13·1 (2), 10·9 (2), 10·7, 9·7   17·7	490-2	Gg	AIIGLI∗ T*		3
498-505	493-4		AIIGLI* T		2
15-1 (2), 12-9   15-1 (2), 12-9   15-1 (2), 12-9   15-1 (2), 12-9   15-1 (2), 12-9   15-1 (2), 12-9   15-1 (2), 15-6, 14-6   15-6, 14-6   15-6, 14-6   15-6, 14-6   15-6, 14-6   15-6, 14-6   15-6, 14-6   15-6, 15-3   15-1, 14-3, 14-2 (2), 13-7   13-1, 10-2   15-7   1					3
15-1 (2), 12-9   15-1 (2), 12-9   15-1 (2), 12-9   15-1 (2), 12-9   15-1 (2), 12-9   15-1 (2), 12-9   15-1 (2), 15-6, 14-6   15-6, 14-6   15-6, 14-6   15-6, 14-6   15-6, 14-6   15-6, 14-6   15-6, 14-6   15-6, 15-3   15-1, 14-3, 14-2 (2), 13-7   13-1, 10-2   15-7   1			Obverse legend ending uncert		8
15-26   G   Subtype uncertain   16-6, 16-2, 15-6, 15-5 (2), 15-1, 14-3, 14-2 (2), 13-7, 13-1, 10-2 1					4
Sils-26   G   Subtype uncertain   16·6, 16·2, 15·6, 15·5 (2), 15·1, 14·3, 14·2 (2), 13·7, 13·1, 10·2   15·7, 14·8, 14·9, 14·5, 13·9, 13·5 (2), 13·1 (2), 10·9 (2), 10·7, 9·7   17·1, 10·					3 2
13-1, 10-2 1			Subtupa unaertain		2
S27-42   Pre-Treaty York subtype uncertain   16·6 (2), 15·6, 15·3, 15·1, 14·9, 14·5, 13·9, 13·5 (2), 13·1 (2), 10·9 (2), 10·7, 9·7 1	313-20	u	Subtype uncertain		12
Treaty Coinage—Transitional Durham  https://doi.org/10.10.10.10.10.10.10.10.10.10.10.10.10.1	527-42	Pre-Treaty	York subtype uncertain		12
Durham	B M				16
Durham		Treaty Cai	ingge_Transitional		
16-6(*)   York   16-2(*)			mage Transmonal		
York	543	Durnam	hm' DORE 1/1/1/1/	16:6(*)	1
16-2(*)   16-2	343	W 1	IIIB BOKE LIIIIII	100()	•
Treaty Coinage   Durham   14-8, 13-2, 12-2     Treaty Coinage   Durham   548-54   N. 1272   AIIGLI DVR EME   17-6, 17-4, 16-9, 16-2, 15-9, 14-2, 12-6   15-55	544	1 ork	IIIIIIII assana V sa ar ra Yana'y	16.2(*)	1
Treaty Coinage Durham  548-54 N. 1272 AIIGLI DVR EME 17-6, 17-4, 16-9, 16-2, 15-9, 14-2, 12-6 555	200				3
Durham   S48-54   N. 1272   AIIGLI DVR EME   17-6, 17-4, 16-9, 16-2, 15-9, 14-2, 12-6   15-55	243-1		minimi mb	170, 13 2, 12 2	-
S48-54   N. 1272   AIIGLI DVR EME   17-6, 17-4, 16-9, 16-2, 15-9, 14-2, 12-6   11-1   12-1   12-1   12-1   12-1   13-7		Treaty Coi	inage		
17-6, 17-4, 16-9, 16-2, 15-9, 14-2, 12-6   11-555   11-1   12-1		Durham	5.3		
12-1   15-7   15-7   15-7   15-7   15-7   15-7   15-7   15-7   16-9   16-9   N. 1269   N. 1260	548-54		AUGU DVR FMF	17.6, 17.4, 16.9, 16.2, 15.9, 14.2, 12.6	7
S56					1
14-8   14-8   14-8   15-1   14-8   15-1   14-8   15-1   14-8   15-1   14-8   15-1   14-8   15-1   14-8   15-1   14-8   15-1				15:7	1
Don's   Don'	557			14.8	1
Obverse legend EDWARD ANGL R DNS HYB  559-60 N. 1264 Don* 561 Don° 17-1 562-5 N. 1265 °EDW DON° 566 °EDW DON 567-8 N. 1268 ANGLI' Pellet stops 569-91 ANGLI Pellet stops 16-3, 15-1 14-8, 14-5, 13-4, 12-9 (2), 11-4, 10-6, 10-5, 10-3 12-6, 11-1 12-6, 11-1 12-6, 11-1 15-1, 14-9, 14-8, 12-8, 9-1	558	N. 1273		12-1	1
Obverse legend EDWARD ANGL R DNS HYB  559-60 N. 1264 Don* 16·0, 14·8 561 Don° 17·1 562-5 N. 1265 °EDW DON° 16·2, 14·9, 14·8, 14·3 566 °EDW DON 15·4(†)  York  567-8 N. 1268 ANGLI' Pellet stops 16·3, 15·1 569-91 ANGLI Pellet stops 17·4, 17·1, 16·5, 16·2 (2), 15·9, 15·4, 15·1 (3), 14·9 (4), 14·8, 14·5, 13·4, 12·9 (2), 11·4, 10·6, 10·5, 10·3 2  592-601 Ending of obv. legend illeg. 16·6, 16·0, 15·9, 15·4, 14·3, 13·9, 13·7, 13·1, 12·6, 11·1 1  602-9 N. 1269 Quatrefoil before EDW and on breast 19·0(†), 15·6 (2), ANGLI 15·1, 14·9, 14·8, 12·8, 9·1		T J			
559-60 N. 1264 DON* 16·0, 14·8 561 DON° 17·1 562-5 N. 1265 °EDW DON° 16·2, 14·9, 14·8, 14·3 566 °EDW DON 15·4(†)  York 567-8 N. 1268 ANGLI' Pellet stops 16·3, 15·1 569-91 ANGLI Pellet stops 17·4, 17·1, 16·5, 16·2 (2), 15·9, 15·4, 15·1 (3), 14·9 (4), 14·8, 14·5, 13·4, 12·9 (2), 11·4, 10·6, 10·5, 10·3 2 592-601 Ending of obv. legend illeg. 16·6, 16·0, 15·9, 15·4, 14·3, 13·9, 13·7, 13·1, 12·6, 11·1 16·2 (2), 11·4, 10·6, 10·5, 10·3 (2), 10·4, 10·4, 10·6, 10·5, 10·3 (2), 10·4, 10·4, 10·6, 10·5, 10·3 (2), 10·4, 10·4, 10·6, 10·5, 10·3 (2), 10·4, 10·4, 10·6, 10·5, 10·4, 10·4, 10·6, 10·5, 10·4, 10·4, 10·6, 10·5, 10·4, 10·4, 10·6, 10·5, 10·4, 10·4, 10·4, 10·6, 10·5, 10·4, 10·4, 10·4, 10·6, 10·5, 10·4, 10·4, 10·4, 10·6, 10·5, 10·4, 10·4, 10·4, 10·4, 10·4, 10·4, 10·4, 10·4, 10·4, 10·4, 10·4, 10·4, 10·4, 10·4, 10·4,		Lonaon	01 1 1	2 22 6000000000	
561 DOn° 17·1 562-5 N. 1265 °EDW DOn° 16·2, 14·9, 14·8, 14·3 566 °EDW DON 15·4(†)  York  567-8 N. 1268 ANGLI Pellet stops 569-91 ANGLI Pellet stops 17·4, 17·1, 16·5, 16·2 (2), 15·9, 15·4, 15·1 (3), 14·9 (4), 14·8, 14·5, 13·4, 12·9 (2), 11·4, 10·6, 10·5, 10·3 2  592-601 Ending of obv. legend illeg. 16·6, 16·0, 15·9, 15·4, 14·3, 13·9, 13·7, 13·1, 12·6, 11·1 1  602-9 N. 1269 Quatrefoil before EDW and on breast 19·0(†), 15·6 (2), ANGLI 15·1, 14·9, 14·8, 12·8, 9·1	550 CO	NI 1264			2
562-5 N. 1265 °EDW DON° 16·2, 14·9, 14·8, 14·3 566 °EDW DON 15·4(†)  **York** 567-8 N. 1268 ANGLI' Pellet stops 16·3, 15·1 569-91 ANGLI Pellet stops 17·4, 17·1, 16·5, 16·2 (2), 15·9, 15·4, 15·1 (3), 14·9 (4), 14·8, 14·5, 13·4, 12·9 (2), 11·4, 10·6, 10·5, 10·3 2 592-601 Ending of obv. legend illeg. 16·6, 16·0, 15·9, 15·4, 14·3, 13·9, 13·7, 13·1, 12·6, 11·1 16·02-9 N. 1269 Quatrefoil before EDW and on breast 19·0(†), 15·6 (2), ANGLI 15·1, 14·9, 14·8, 12·8, 9·1		14. 1204			1
566         °EDW DON         15·4(†)           567-8         N. 1268         ANGLI' Pellet stops         16·3, 15·1           569-91         ANGLI Pellet stops         17·4, 17·1, 16·5, 16·2 (2), 15·9, 15·4, 15·1 (3), 14·9 (4), 14·8, 14·5, 13·4, 12·9 (2), 11·4, 10·6, 10·5, 10·3         2           592-601         Ending of obv. legend illeg.         16·6, 16·0, 15·9, 15·4, 14·3, 13·9, 13·7, 13·1, 12·6, 11·1         12·6, 11·1           602-9         N. 1269         Quatrefoil before EDW and on breast 19·0(†), 15·6 (2), ANGLI         15·1, 14·9, 14·8, 12·8, 9·1	23.747 (been)	N 1265		terrance of the contract of th	4
York         567-8       N. 1268       ANGLI' Pellet stops       16·3, 15·1         569-91       ANGLI Pellet stops       17·4, 17·1, 16·5, 16·2 (2), 15·9, 15·4, 15·1 (3), 14·9 (4), 14·8, 14·5, 13·4, 12·9 (2), 11·4, 10·6, 10·5, 10·3 2         592-601       Ending of obv. legend illeg.       16·6, 16·0, 15·9, 15·4, 14·3, 13·9, 13·7, 13·1, 12·6, 11·1 1         602-9       N. 1269       Quatrefoil before EDW and on breast 19·0(†), 15·6 (2), ANGLI       15·1, 14·9, 14·8, 12·8, 9·1		14. 1205		5 D (CO) (CO) (CO)	1
567-8 N. 1268 ANGLI Pellet stops 569-91 ANGLI Pellet stops 17-4, 17-1, 16-5, 16-2 (2), 15-9, 15-4, 15-1 (3), 14-9 (4), 14-8, 14-5, 13-4, 12-9 (2), 11-4, 10-6, 10-5, 10-3 2  592-601 Ending of obv. legend illeg. 16-6, 16-0, 15-9, 15-4, 14-3, 13-9, 13-7, 13-1, 12-6, 11-1 1  602-9 N. 1269 Quatrefoil before EDW and on breast 19-0(†), 15-6 (2), ANGLI 15-1, 14-9, 14-8, 12-8, 9-1	200	York	LD II DON	25.102	8
569-91 ANGLI Pellet stops 17-4, 17-1, 16-5, 16-2 (2), 15-9, 15-4, 15-1 (3), 14-9 (4), 14-8, 14-5, 13-4, 12-9 (2), 11-4, 10-6, 10-5, 10-3 2  592-601 Ending of obv. legend illeg. 16-6, 16-0, 15-9, 15-4, 14-3, 13-9, 13-7, 13-1, 12-6, 11-1 1  602-9 N. 1269 Quatrefoil before EDW and on breast 19-0(†), 15-6 (2), ANGLI 15-1, 14-9, 14-8, 12-8, 9-1	567-8		ANGLI' Pellet stops	16.3, 15.1	2
14·8, 14·5, 13·4, 12·9 (2), 11·4, 10·6, 10·5, 10·3 2  592-601 Ending of obv. legend illeg. 16·6, 16·0, 15·9, 15·4, 14·3, 13·9, 13·7, 13·1, 12·6, 11·1 1  602-9 N. 1269 Quatrefoil before EDW and on breast 19·0(†), 15·6 (2), ANGLI 15·1, 14·9, 14·8, 12·8, 9·1		5 5350			
12·6, 11·1 1 602-9 N. 1269 Quatrefoil before EDW and on breast 19·0(†), 15·6 (2), ANGLI 15·1, 14·9, 14·8, 12·8, 9·1			PROTECTION FOR CONTRACTOR OF THE PROPERTY OF T	14.8, 14.5, 13.4, 12.9 (2), 11.4, 10.6, 10.5, 10.3	23
602-9 N. 1269 Quatrefoil before EDW and on breast 19·0(†), 15·6 (2), ANGLI 15·1, 14·9, 14·8, 12·8, 9·1	592-601		Ending of obv. legend illeg.	16.6, 16.0, 15.9, 15.4, 14.3, 13.9, 13.7, 13.1,	
ANGLI 15·1, 14·9, 14·8, 12·8, 9·1					10
	602-9	N. 1269	Quatrefoil before EDW and or	n breast $19.0(\dagger)$ , $15.6(2)$ ,	2
Z10 11 3T 1870 A	***	NT 7000			8
This is a second of the second		N. 1270			2
					1
				AN ELECTRICAL STATE OF THE STAT	2
					2
618-34 Treaty pence of York with details of stops uncertain 15-9, 15-6 (2), 15-4, 14-8 (3),		Treaty per			2
	310 34	arouty per	or a continue de diop		17

		THE ATTENBOROUGH, NOTTS., 1966 HOARI	0	71
	Treaty-Po	st-Treaty Mules		
	Durham			
635		DVn OL™ No rev. i.m.	15.4(*)	1
	London			
636-7		°EDWARD°Angl°R°Dns°hyв LOИ DOЙ	14.5(*), 14.3(*)	2
	Post-Treaty	Coinage		
	Durham	(5)		
638-9	N. 1296	Angl. ∓xFR' No cross before civi	16.5, 14.2	2
640-1	E:03.0-234-27-27	Angl×x×r' +civi	16.3, 10.5	
642		Long obv. legend Before CIVI illeg.	18:1	1
643-52	N. 1297	Anglie o on breast 17.9, 17.1, 15.9 (2), 15.6 (2), 14		
653–6			·2(*), 16·0, 15·3, 14·8	4
657–9		Anglie Nothing on breast	16.6, 16.0, 13.9	3
660–8			17·4, 17·3, 16·8, 15·7, , 14·4, 13·6, 12·3, 9·8	9
669		Anglie* Ornament illeg.	15.1	
670-1	Post-Treaty	pence of Durham type uncertain	14.1, 13.6	
,	Ye de			
672-3	<i>York</i> N. 1293	+EDWARD*REX*Angl* 3*FR'*D +CIVI TAS* EBOR ACI + On	breast	
012-3	14. 1275	TEDWARDAREARAIIODA IATR D   CITI Ind EBOR ACT   CIT	11-7(*), 14-6	2
674		FRANC Ornament illeg. CIVI	13.9	
675		FRAN + on breast + CIVI TAS EBOR ACIX	17.7	
676		(FRAN) Ornament illeg. ///// TAS× //////	13.2	
677		FR's? + on breast civi TAS* EBOR ACI*	15.4(*)	
678		(FR?) + on breast +CIVI TAS* EBOR ACI*	13.9(*)	
679		FR' Ornament illeg. CIVI /////	15·3 13·7	
680		F' + on breast *CIVI TAS EBOR ACI	13.4	
681		Ending of obv. legend illeg. saltire stops	13.4	
682		Angl: 7:FR' o on breast CIVI TAS EBO RACI Extra pellet in EBO quarter	13.4(*)	1
683		+EDVA////// /// TASSEBOR AC/////	13.9(*)	
684		Obv. illeg. //// //// EBO RACIS	13.7	1
685		Obv. illeg. //// //// \$EBO ///////	14.3	1
686-8	N. 1294	+EDWARD2DI2GRA2REX2ANG Nothing on breast	15.9, 15.1, 13.1	3
		*CIVI TAS EBO RACI	14.9	1
689		Same except no saltire before CIVI	16.8, 16.5	
690–1		Same but before civi illeg.	100,103	-
	N. 1295	Nothing on breast	2011 PTE - 17-417 ACES	1020
692-3		+EDWARDVS*REX*ANGLIE*ET CIVI TAS EBOR ACI*	14.2, 11.5	
694		Anglie* Cross and four pellets i.m. ///// TAS *EBO RA////	14.3(*)	1
695		ANGLIE /////	16.5	
coc =+++		CIVI *TA/// //// ACI*	16.5	1
696–711		*CIVI TAS*EBO RACI 16.8 (3), 16.6, 16.2 16.0	(2), 15.9, 15.7, 15.6,	
		15.4, 15	9·3 (2), 13·7, 11·9, 9·8	
712		Same except extra pellet below EBO	13.6	1
713-15		Same except EBOR ACIX	100 110 121	•
		No extra pellet	15.9, 14.8, 13.4	2
716-17		Same as previous except civi	13·7, 10·6 15·9, 15·6, 15·1	3
718-20		Same as previous except *EBO RACI	13.9, 13.6, 13.1	1
721		Before CIVI illeg. *EBO RACI	15.9	
722		*CIVI Division of EBORACI illeg.	14.8	
723 724		*CIVI EBO* RACI	16.5	î
		+CIVI (Initial cross, not saltire)       R A     CIVI Extra pellet below ACI	14.5(*)	
725				

72	THE	ATTENBOROUGH,	NOTTS., 1966 HOARD
	+ on t	reast all Anglie	
728-32	*CIVI *I	BO RACI	16.8, 15.1, 13.7, 12.5, 12.3
733		BOR ACI*	14.1
734		Division of EBORACI illeg.	14.2
735-6			16.2, 14.6
133-0	Rev. ill	eg.	16.2, 14.6
	To 100 to	east Anglie unless stated	
737	Anglie	+ CIVI TAS *EBO RACI	14.3
738-43	*CIVI *I	BO RACI	16.2 (2), 16.1, 12.0, 10.9, 10.3
744-7	*CIVI E	BOR ACI*	15.7, 14.6, 14.1, 10.8
748	(Angli	E) ////// /////S· *EBO RACI	16·2(*)
749	Treaty	X	12.6(*)
	? on br	east All probably anglie	
750	*CIVI *I	EBO RACI	15.7
751-2		out before CIVI illeg.	17.1, 14.3
753		CIVI illeg, EBOR ACIX	14-9
754	*CIVI T	Division of EBORACI illeg.	14.6
755-6		etails illeg.	14.2, 13.6
757		ost-Treaty	5·2(*) (chipped)
758–67		incertain York mint	14·9, 14·3, 14·1, 13·1, 12·8, 12·3, 12·1, 11·9,
130-01	Edward III period (	incertain 101k mint	10.8, 10.2
		Half-pe	HOR
	2nd Coinage 1335-4		ice
	London		
768-71	H & W O18 (var.)	+EDWARDVS REX AIIG	(6 pts.)
		CIVI TAS LOII DOII* (6 p	ts.) 8.6, 7.8, 7.5 (2)
772-3		Same except no * after	DOIL
5 80		End of obv. legend ille	
774		+EDWARDVS REX AII*	
		CIVI TAS LOII DOII* (6 p	
775-6	O18	+EDWARDVS REX AIIG	
,,,	2000	CIVI TAS LOH DOH* (8 p	
777		Stars illeg. both sides	6.1
	Florin Coinage 1344	1-51	
	London	51	
778-84	O21	EDWARDVS REX	
,,,,	Part Terms	CIVI TAS LOD DOD	9.8(†), 8.8, 8.3, 7.8, 7.7, 7.4, 7.2
785	O21/b	Same obv. type. Extra	
786	O23	Bust illeg.	7.2
787	O25	Bust meg.	6.9
	O21/O26	Small letters on rev.	7.8(*)
788 789	O21/O26 O28	Sman letters on lev.	7.2
. 02	Treaty Coinage		
790	(.EDW) ARD	VSOREXOAD	
790	CIVI TAS ///		
		die as B.M. coin 1936/4/	1/6034 6.0
		RICHAR	D II
		Penc	
	London	A 100	
791	+RICA	RDVS*REX*ANGLIE	
	CIVI TA	s LOИ D//////	15-4(*)
	Durham		
792		RD/////////	
	///IVI	/// D///// ////	17·1(*)
	Same	lies as B.M. coin, BNJ x	(xi (1962) PL IX 30

		THE ATTENBOROUGH, NOTTS.	, 1966 HOARD	73
	York			
	London die	s		
702.0	74.1.2			
793-9	IA 1-2	Anglie (2) ? on breast Before Civi illegible EBO/R	15.1 (2), 14.3, 14.1, 13.6, 13.2, 12.9	7
800-3		Anglie (2) ? on breast		
		CIVI EBO/R	17.7, 15.6, 13.7, 13.6	4
804-16	IA 2	Anglie Cross on breast	A 15 C 15 A 14 O (4) 14 D 13 7 13 0	13
817	IA 3-4	CIVI EBO/R 16.9, 16.8, 16.7, 16 Anglie* Cross on breast	5.4, 15.6, 15.4, 14.9 (4), 14.8, 13.7, 12.8	13
017	1/4 3-4	*CIVI EBOR/A	16.2	1
818-24		anglie Cross on breast		
INTERNATION AND		*CIVI EBOR/A	17-3, 16-8, 16-6, 16-4 (2), 14-5, 11-5	7
825-6		anglie Cross on breast	901W 30 W	2
		*CIVI TAS EBOR ACI*	15.9, 12.8	2
827-37		Anglie Cross on breast Before civi illeg. EBOR/A 18.8, 17	1, 16-1, 15-7 (2), 15-2, 14-9, 14-5, 14-1,	
		Before civi fileg. EBOR/A	13.7, 13.4	11
838-42		ANGLIE Cross on breast	1000 PM 1000 A	77
		CIVI TAS EBOR ACI*	17.7(†), 17.1, 16.3, 15.9, 15.6	5
843-4		End of obv. legend illeg. ? on breast		
0.15	**	CIVI ////A	15.6, 14.6	2
845	IA	End of obv. legend illeg. Cross on breast Rev. details illeg.	15.7	1
846-8	IA/IB	Obv. all very worn	15 /	ă.
040	111/12	*CIVI TAS *EBO RACI Pellet below B	16.3, 14.3, 13.2	3
		All same dies		
849	IB/IA	Very poor condition	10-8	1
850-6	IB	Anglie z * Pellets by shoulders	17. 16.1 (2) 15.1 14.0(4) 12.0 12.2	7
		*CIVI .EBO Pellet below B Same die as P. 21	17·1, 16·1 (2), 15·1, 14·9(*), 13·9, 13·2	7
857		Anglies Pellets by shoulders		
051		.CI//// //// EBO RACI. No pellet below B	13-1(*)	1
858		Anglie* Pellets by shoulders	100-5020 M	
		·CIVI TAS· ·EBO RACI· No pellet below B	17·1(*)	1
	7999	Same rev. die as previous		
859	IB	Anglie* Pellets by shoulders *CIVI TAS .E///// ///ACI Pellet below B	15.6	ï
860		Angl///// Pellets by shoulders	15-0	
300		*CIVI //// .EBO R//// Pellet below B	13-2(*)	1
861		Details illeg.	11.4	1
862-7	IIA	Anglie With breast line		
232 22		*CIVI	16.5, 16.2, 16.0 (2), 14.2, 11.7	6
868–72		Anglie With breast line No * visible before Civi	16.5, 16.2, 13.6, 13.5, 12.8	5
873	IIB/IA 3_4	Anglie No breast line	10 3, 10 2, 13 0, 13 3, 12 0	~
073	110/1103	*CIVI TAS EBOR /////	15-3(*)	1
874-8	IIB	Anglie No breast line	ST 51	
070.00	**	*CIVI	16.8, 15.3, 14.2, 13.2, 12.9	5

Obv. too worn to distinguish sub-class

CIVI TAS (? scallop) E//// ACIX

ACI\* ? scallop after TAS as previous

Angl\*5\*FRAn

FRAn'

FRAIL

CIVI TAS EBO RACI

Same dies as P. 71

Same obv. die as P. 73

879-89

890-2

893-4

895-7

898

II

IIIA/II

IIIA

IIIB

Uncertain

17-1, 16-3, 15-6, 15-1, 14-9, 14-8 (2),

14.3 (2), 13.2, 11.7 11

15.1, 14.6(\*)

12.9

3

2

14.2(\*), 14.2, 11.7

13.7, 13.2, 12.5(\*)

# Local dies

# Group A

899-906		Anglie×	
899-900		*CIVI TAS ,EBO RACI	17·3(*), 15·7, 15·6(+), 15·3, 14·5, 13·4, 12·6, 12·3
		Same dies as P. 42	17 5( ), 15 7, 15 5( ) , 15 5, 14 5, 15 4, 12 6, 12 5
907		Same obv. die but rev. of P. 3	7 16.2(*)
908-912		Same obv. die, revs. uncertain	16.1, 14.6, 13.2, 12.9, 12.6
913		Different dies	15.4(*)
914		Same dies as P. 40	5.7. 13. X.
		No , before EBO visible	15.3
915-19	Group B	ANGLE	
	E-9-Januar-16-CP-0-0	CIVI TAS .EBO RACI	15.3 (2), 14.4(*), 11.2, 11.1
		Same dies as P. 46	
920		ANGIE	
		*CIVI TAS .EBO RACI	15-6(*)
		Same dies as P. 44	
921	Group C	ANGILE	
		.CIVI TAS E(reversed)BO RACI	12.9
202		Same dies as P. 49	
922		Angilex	[4/3004]
		*CIVI	14.6
002 4		Same dies as P. 50	
923-4		ANGILEX	10.274 1.12
		*CIVI	19·3(*), 14·3
925-6		Same dies as P. 51	
923-0		Anglie*	14.6, 13.1(*)
927-8		*CIVI TAS E(reversed)BO RACI Same obv. die as previous	14.0, 13.1(*)
121-0		Rev. die different. E off flan in	one case illeg, in other 17.4, 13.6
929-30		///////ARDVS///REX.AHGLI////	one case meg. in other
222 30		///////ARDVS///REX.ARGEI////	13.7, 13.6(*)
		Two coins from same dies	15 1, 15 0( )
931-5		Illeg. obvs., probably C	15.6, 14.6 (2), 13.9, 13.2
936-8	Group D	Angilie	15 0, 14 0 (2), 15 3, 15 2
5375 ×177	753 (A. J. 1876)	*CIVI TAS EBO RACI	15.3, 14.8, 14.6
		Same dies as P. 52	
939-44	Group E	Ang Fran	
	58289A309000001	*CIVI TAS EBO RACI	16.5, 15.9, 15.7(*), 15.7, 15.1, 13.9(*)
		Same dies as P. 53	
945		RI/////////////S*REX*ANGILFR	
		+CIVI TAS EBO ////CI	10.8(*)
946-9		Local including one fragment	14.5, 12.1, 11.5, 5.5
		veen London and Local dies	
950-1	IA5/A	Anglie×	19 TO J 1992 - 1993 (1922)
		///// TAS .EB/// //////	16.9(*), 15.7
2022		Same dies as P, 31	
952	IA/Local	Dies uncertain	13.9
953	C/II	Angile×	
		*CIVI	22.250
054	D/m	Same obv. die as P. 51, rev. di	fferent 14·5(*)
954	D/IB	Angi/////// Spacing suggests I	ong D legend
055 0	THE	*CIVI TAS .EBO RACI Pellet belo	w B 14·8(*)
955–9	F/II	Dns eb	16.6(*) 15.1 14.6 14.2 12.1
		CIVI Same dies as P. 34	16.6(*), 15.1, 14.6, 14.3, 12.1
960	? A/IA	Danie ules as F. 34	13-9(*)
961	F/III	DNS EB	13.9(*)
201	7 / 111	CIVI	13-2(*)
		Same dies as P. 65	13.2(*)
		Daniel Glob as 1, 05	

	THE ATTENBOROUGH, NOTTS., 1966 HOARD	75
	Halfpence	
	Rev.: CIVI TAS LON DON unless stated	
	Intermediate types	
962	+RICARD*REX*ANGL'	
	CIVI TAS LOH DOH 6.9(*)	1
062.5	Same obv. die as P. 4	2
963-5 966	+ricard*rex*angl* 8.9, 7.5, 5.5 +ricard*rex*angl* 7.1	1
967-9	+RICARD*REX*ANGL 8.6 (2), 8.5	3
970	+ricard*rex*angl 9·1	1
971 972	+ricard*rex*angt 7.4(*) ////////rex×angl 7.4	1
973	Saltire stops, end of obv. legend illeg. 7.1	1
974	+RICARD'REX: ANGL	990
076	Same obv. die as B.M. coin 1935/4/1/6108 9.8(†)	1
975 976–7	Same obv. die as previous, rev. die different from previous and B.M. coin 8·3 +RICARD¹REX: ANGL 8·9, 7·8	1 2
978	+RICAR////////ngl Stops illeg. 6·1	ĩ
	* 0 1 ***	
980	Late type III +RICARD*REX*ANGLF* 7.8	1
981	///icard*rex*angl'f 6.9	1
982	+RICARD♥REX♥ANGL*F 10·I	1
983	+RIC//////LIE 9·2(*)	1
985	$+ RICARD_{REX_*}^* / / / nGL_*^*$ 8.5(*)	1
	Late type IV	
984	+RI//////RD*REX*ANGLIE Rev. of type III 8.8(*)	1
979 986	+RI//////RD'*REX*ANGL' 7.2(*) +RICARD*REX*ANGL* 7.8(*)	1
200	TRICARDAREXAMIGEX 7.0()	
	RICHARD II/HENRY IV MULE	
	Halfpenny	
987	+RICA/////REX*////// Intermediate type Rusty die	
15.51	Rev. die of Henry IV Heavy (?) Coinage 8-6(*)	1
	***************************************	
	HENRY IV/RICHARD II MULE	
	Penny London	
988	+hen/////icwd.cg.kex///////////////////Heavy coinage Star on Breast	
	CIVI //// Lon Don 16·2(*)	1
	Rev. die of Richard II type	
	HENRY IV	
	Pence	
	Heavy Coinage	
000	York	
989	+henric*rex**\pingl\; \frac{1}{2} Francie Long neck  Civi tas ebo raci  17:1	1
	Same dies as B.M. coin without provenance	1
990-3	Same obv. die as previous	
	CIVI TAS EBO RACI 18-5(†), 16-8, 15-7, 12-9	4
	Same dies as B.M. coin 1950/6/7/1 ex L. A. Lawrence	

76	THE ATTENBOROUGH, NOTTS., 1966 HOARD			
994-9		+henric' Rex nngl' frnc' in flaw above left shoulder		
1000		Same rev. die as previous Same reading as previous CIVI///// TAS EBO RA//////// Same dies as B.M. coin Shirley-Fox exchange	5·9 (2), 14·6, 14·5 15·4(*)	
	Light Co.	Same obv. die as previous, same rev. die as 989 inage		
1001-2	York	+henric: × rex * Anglie Annulet on breast °CIVI (TAS °EBO RAC)I		
1003	+ henric	Same obv. die as B.M. coin 1914/5/17/26	14.6(†), 14.6	
1004		°CIVI ///// RS °EBO RACI Same obverse die as previous but very rusty	14.9(*)	
100+		CIVI /////sº EBO° RACI	14-3(*)	
	Heavy Co	Halfpence		
		omage		
1005	London	+h///RIC* ///////GLIE Early style Square flan Same obv. die as B.M. coin 1935/4/1/6122 Similar in very worn condition	9.5(*)	
1007–8		+//////C*REX*ANGLIE Later style Two coins from different dies	9·8(*), 8·1	
1009–10		+hE//////×RE///×AngLI Later style Both coins from same dies	9.5(*), 8.5(†)	
		Especial Control of the Management		
		HENRY V		
	London	Groats		
1011 1012–15	С	No mullet on shoulder. Severely clipped, only bases of letters v +henric di gra*rex*anglie* *** ** ** ** ** ** ** ** ** ** ** **	visible. 46·3(†)	
		FRANC' + POSVI+ DEVM*A DIVTOR EZMEVM CIVI TAS* LON DON* 60.5, 5	59.4, 58.9(†), 58.5	
		Half-groats	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
	London	FOR IN THE SECOND SECON		
1016	С	Broken annulet to left of crown, mullet in centre of breast.  +he REX ANGLIE* 5*F		
		+ POSVI* DEVM*A DIVTO RE*ME* CIVI TAS* LON DON	29.8(†)	
	London	Pence		
1017	P. V	Double struck + henric'*rex*angl* * * F Trefoil to left, mullet to right of crow civ//// ///// Lon don* ? contemporary forgery	7·5(*)	
	Durham			
1018	P. VI	Mullet to left, filled annulet to right of crown       RIC × REX       CIM	15.7(*)	
1018 1019-20		Mullet to left, filled annulet to right of crown       RIC×REX     CIVI            OLM*  Mullet above pellet to left, broken annulet to right of crown + henric     *Anglie+            DVN OL     Both coins from the same oby, die	15·7(*) 13·1, 12·9(†)	

		Paradesi eura de desar			(5)
	York				
		bverse dies			
		noted when visil			
	P. VI	Mullet to left,	broken annulet to right of crown		
1021		Anglie* **F		12.9	1
1022-3		ANGLIE		14.8, 14.5	2
1024		Angl* 3*Frn		12.8	1
1025-7		AngL× ≯×F		15.9, 13.9, 13.4	3
1028-9		Illeg. but long		14.3 (2)	3 2 3
1030-2		Illeg, but short		14.6, 13.2 (2)	
1033-8		End of legend		16·1 (2), 14·8(†), 14·2 (2), 13·6	6
	P. VII	Mullet to left,	annulet to right of crown		
1039		Angl×≯×FRAnc		15.1	1
1040-1		Angl× 9×F'		14.6, 13.9	2
1042		Angl* 5*F		13.9	1
1043-6		End of legend	uncertain	15.7, 14.9, 14.5, 13.1	4
	P. VI or V	/II			
1047-9		End of legend		14.2, 14.1, 13.9	3
1064	P. VIIIa	Trefoil over m	ullet to left, annulet to right of c	rown	
		Angl* 9 *FRAnc		12.6(*)	1
	P. VIII		trefoil to right of crown		
1065		Anglie * 5 * F' TA		15.6(*)	1
1050-1		End of legend	uncertain	15.5, 13.9	2
		TASX			
1052		Type illeg.		14.1	1
1063		Mule London	obv. local rev.		
	P. VII	Angl* \$ *FRAnc	TAS*	10.3(*)	1
		Local obv. die	S		
1053	P. VI	ANGLIE		15.4	1
1054		End of legend	uncertain TAS*	15.3	1
1055-6		End of legend	uncertain	13.6, 12.1	2
1057	P. VII	Angl ///////A		14.6	1
1058		///OLI(E)		13.2	1
1059		Illeg, but long	obv. legend TAS*	14.1	1
1060-1		Illeg. but long		15.1, 10.8	2
1062, 1062	2a, 1102	Illeg, but shor		15.5, 14.9, 13.2	3
	Charles and the Charles		CESTELLIS WE SAME	SHOW WILLIAM IS	
			SCOTLAND		
			ALEXANDER III 1249-86		
	2nd Cain		Pence		
1000	2nd Coina		N= 27.4	14.6	¥
1066	Burns Gre	oup II Class II	No. 37 4 mullets of 6 pts.	14-6	1
1067–8			No. 38 but larger head of 40		
			2 stars of 7 pts.	12.0 12.2	2
			2 mullets of 6 pts.	12.8, 12.3	2
			Town D 1202 06		
			JOHN BALIOL 1292-96		
			Penny		
	2nd Coina				
1069	Burns Cla	iss I St. Andrews	No. 11 Reverse pts. illeg.	13.9	1
			DAVID II 1329-71		
			Pence		
	1st Coina	ge, Group II, afte		_	
1070		orvm type	No. 27	14-2(†)	1
		age, 1357-67, Gro		.42(17	-
1071	Edinburgh		No. 10 but ornate A	10-8(*)	1
		ige, 1367-71	EDITALIAN KARAMINININI	.50( )	.77
1072		h 3rd Coinage	No. 11a Star behind head	12.9(*)	1
7242		comago		//	-

78	THE ATTENBOROUGH, NOTTS., 1966 HOARD				
			ROBERT II 1371-9	0	
			Halfpenny		
1073	Edinburgh		No. 3/2		6.7(*)
			ROBERT III 1390-14	406	
			Pence	652	
estedituris.	Heavy Coinage	, 1st Issue	are on the same of		
1074	Edinburgh			EX-SCOTORVM (2) VILL A:ED In coin 1950/3/1/22 ex Skipton	13·2(*)
1075	Heavy Coinage	, 2nd Issue	No. 3a		8.8(*)
			Halfpence		
	Heavy Coinage	1st Issue	Напрепсе		
1080	Edinburgh	, 131 13340	+ ROBERTV///////CO //////	L/// A:ED IBV RGh	6.1(*)
	Heavy Coinage	, 2nd Issue	A Print to the Print Plantage Street and A Acres Street and A Street		4 1171 14 14 14 14 14 14 14 14 14 14 14 14 14
1076 1077	Edinburgh		No. 2 Same dies as Fig. No. —	382 Chipped	4.0(*)
TOTO DAY			+ROBERTVS: //////SCO V		5.8(*)
1078			+//////ERTVS://////SCOT	VILL AED ///// ////RG	5.7(*)
1079			+ROBE///TVS///////COT ///LL AED //// VRG		6.9(*)
1081	Perth		/////RT*DEI GRA VILL A	///// pep Th×	5.8(†)
1001	Torus		Same dies as B.M. coin		3 0(1)
				*	
			IRELAND		
			Pence of Edward I		
	2nd Issue 1281-	-2 Dolley C			
1082	Dublin			ops. Letters: curved/straight	
		D to left of	of bust		16.6
1083	Waterford		s on obv. Letters curved	both sides	4.2.831
	0	CIVI TAS W	ATE RFOR'	· ·	16.8(†)
- 0			14		
			CONTINENTAL		
			Deniers		
	Brabant	Jean I, 12	68–94		
1084	Ch. 97				15-3(†)
	Flanders	Robert de	Béthune, 1305-22		
1085-6	Ch. 12	Mint of A			15.3, 12.5
1005					evolume/section
228025	Ligny		1270–1316		
1087	Ch. 225 (var.)	Irish type	G DOM INVS DELINY		
		Mint of S	MON ETA ///R AIN		16.6(*)
	5				100()
	Luxemburg	Jean l'Ave	eugle, 1309-46		
1088	Ch. 170				12.3
1089	Ch. 179		11 11		8·1 9·8
1090 1091	Ch. 181 Ch. 186 (var.)	+:IOhani	E(eagle)s:D/////		, 0
1071	CII. 200 (var.)		TP OL (eagle)		14.3
1092	Ch. 187 (var.)		NES DEI GRA		16.1(†)
Section Control		DVX BRA B	an tie		
	Porcien	Gaucher of	le Châtillon, 1312-22		
1093-4	Ch. 241	Mint of Y	350		16.1, 14.3
1095-7	Ch. 244	Mint of Y		16.8	, 10.9, 10.3

Rummen 1098 Ch. 160 (var.)

n Arnold d'Orey, 1331-65 (var.) + ERMWLDVSDOMYM/////

MO//// ETA RVM INOR

12.5 1

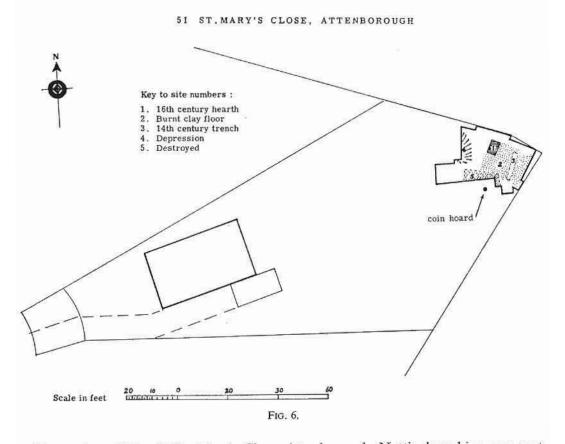
Uncertain Continental
1099-1100 Fragments of two coins

#### APPENDIX

#### A. G. MACCORMICK

#### THE SITE AND CIRCUMSTANCES OF DISCOVERY

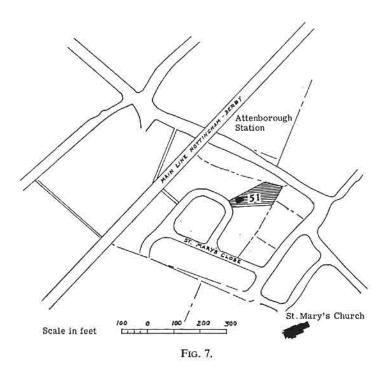
ATTENBOROUGH lies in the Urban District of Beeston and Stapleford, some five miles south-west of Nottingham, in the Flood Plain of the River Trent at 92-5 feet O.D. The subsoil is gravel, overlain by 3-5 feet of yellow alluvial clay.



The garden of No. 51 St. Mary's Close, Attenborough, Nottinghamshire, was part of a pasture field until 1963-4 when St. Mary's Close was built and lies about 200 yards north of St. Mary's Parish Church. No documentary evidence for the site can be found.

In May 1966 the owner of No. 51, Mr. H. G. Roberts, was double digging a bean trench at the east end of his garden. He had already noticed and removed a number of small stones when his spade broke the neck of a small jug containing the hoard and lying about 15 inches below the pre-1963 ground surface. The jug contained a piece of cloth and a small bronze bell in addition to the coins.

Other medieval potsherds had been found but were not considered of interest until the discovery of the hoard, and as the bean trench was continued to the north another 6 feet, more stones were removed.



Later in 1966 and in 1967–8 a small-scale excavation was undertaken on behalf of the Castle Museum, Nottingham, to discover any relationship between the hoard and the remains of buildings suspected from the number of potsherds and stones in the garden. Unfortunately no relationship could be proved because of destruction by the bean trench of the stones and clay level immediately underlying the hoard. However, the jug was said by Mr. Roberts to have nestled between three stones at a level approximately that of a near-by fifteenth-sixteenth-century structure. The excavation was on too restricted a site to give entirely satisfactory results, and much damage had been done to the shallow remains by ploughing and garden digging, but the following seems to be the main sequence of occupation as far as it could be examined:

#### Period I (c. 1250-1300)

A small gully (? part of a drainage trench) running east-west contained wood ash and a few sherds of Nottingham thirteenth-century cooking-pots.

## Period II (c. 1300-1350)

Eighteen inches of yellow clay (natural to the site) covered the period I gully (presumably to construct a house-platform for the subsequent structures and possibly to raise the site above occasional flooding from the Trent).

About 1300 or soon after, rubbish was buried in a shallow pit in the top of the yellow clay layer and included sherds of Nottingham panchions and jugs.

No structures of this period were identified but numerous scattered potsherds, reused masonry, and a Dublin penny of Edward I<sup>1</sup> indicated the presence of a building near by.

## Period III (c. 1350-1400)

An irregular, partly stone-lined and rubble-filled trench, which might have served either as a soakaway or as the base for a cob (mud) wall, was dug north-south to a depth of about 15 inches. Among the filling was a broken stone mortar. More important, pottery included most of a large cooking-pot in 'Midland purple ware' associated with a glazed cordoned jug dated from Nottingham examples to about the mid-fourteenth century. Even if the jug was a survival, the cooking-pot and trench fill should have been deposited by 1400 and the pot is, therefore, one of the earliest known vessels in this fabric.

It is probable that period III also saw the initial construction of the rectangular house with reddened clay floors whose fragments form the main evidence for the nature of structures on the site. Unfortunately, it is not yet possible to date most 'Midland purple wares' of the Nottingham area to any precise period within the fifteenth-sixteenth century and apart from the trench fill mentioned above, neither floors nor wall remains produced any material other than 'midland purple wares'.

# Period IV (c. 1500-1600)

This period is dated by the presence of brown or black glazed 'Cistercian ware' pottery.

The depression west of the building was filled with rubble to form a yard surface, clay and pebbles, and included worked building-stone, roof tiles, and fragments of quernstones. A layer of coal and domestic refuse lay over the yard.

The building seems to have been a house. A shallow depression in the clay floor in the north-west corner may have served as a hearth, and was certainly replaced by a stone-built fireplace. Its location in a corner of the building and dateable to the sixteenth century, makes it almost certain this was of the 'inglenook' type common in the East Midlands from the later sixteenth century.

Wall remains were scanty, defined by the absence of floor or stone yard surface rather than the presence of obvious walling material. On the north side, however, a shallow trench partly lined with cobble stones defined the edge of the floor, and quantities of patchy yellow clay above this may represent the remains of cob walling.

There was no evidence for timber construction of any kind except two probable post bases in stone, south and south-east of the fireplace.

The east end of the building lay under the boundary hedge and the southern side was dug away in 1966.

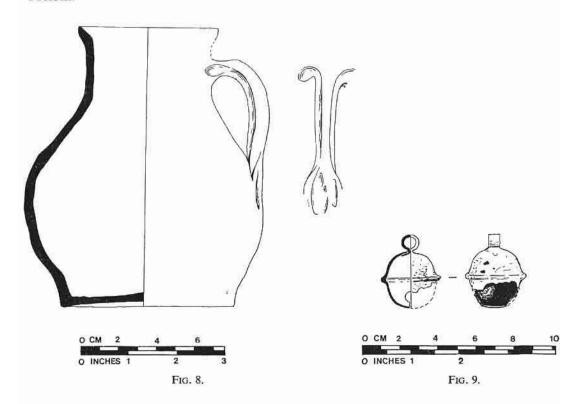
From the pottery evidence there was no occupation after c. 1650.

<sup>1</sup> 2nd Issue 1281-2. Dolley Class II. Curved letters both sides. In very worn condition, Wt. 15·6.

C 7473

## The Jug

The jug was damaged by Mr. Roberts's spade, otherwise it was probably intact until discovery. It is small, squat and with a slightly everted rim. There is no trace of a pouring lip. The base is almost flat and the handle pulled with thumb marks at the top and bottom.



The fabric is a type of 'Midland purple ware', that is, the body is very hard (semi-vitrified) and contains large quantities of coarse quartz grit. The colour is dark grey with lighter grey-buff areas. The jug is unglazed except for a patch of purple brown lead glaze  $(1.7" \text{ high} \times 1.3" \text{ wide})$ , with a small splash of yellow, on the front of the jug near the bottom.

Dimensions:	Height	5.8"	148 mm
	Maximum diameter	4.8"	122 mm
	Base diameter	3.6"	90 mm
	Rim diameter	2.9"	73 mm

#### The Bell

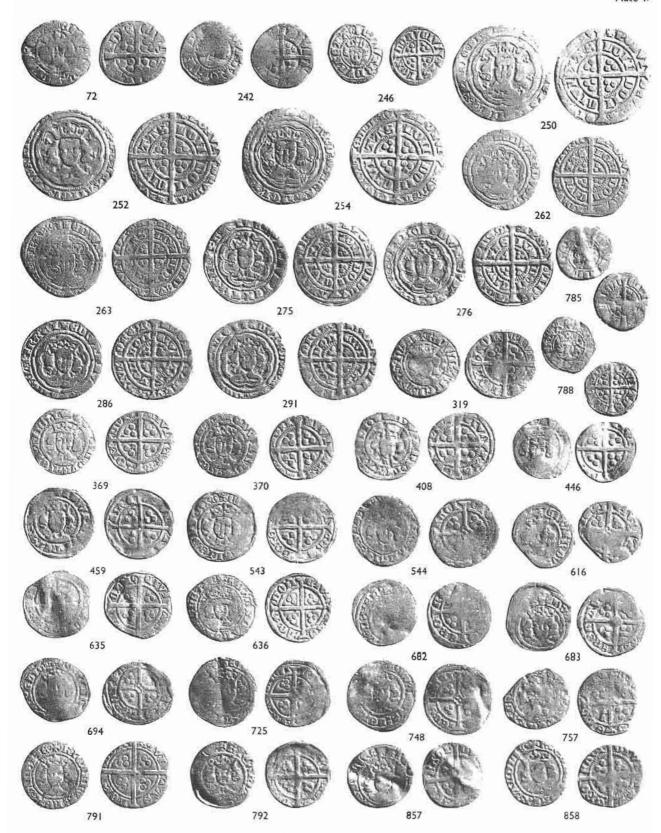
Believed to have been inside the neck of the jug at the time of discovery. This is a small bronze bell of the 'hawk bell' type. It was slightly damaged at the time of discovery when about a quarter of the lower part was lost, revealing the much corroded remains of the iron 'pea' inside.

Dimensions:

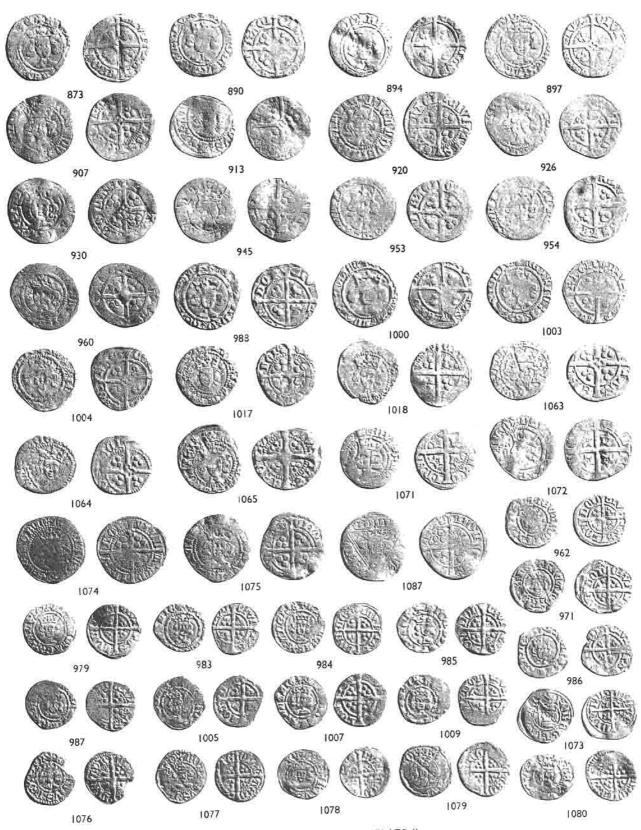
Total height, including ring Height excluding ring Maximum diameter 0·8″ 0·6″ 0·61″ 20 mm 15 mm 15·5 mm

## The Cloth

Two small fragments of woollen cloth were found in the neck of the jug with the bell and coins. The original form of this cloth is undeterminable but was probably not a bag as there are the remains of a seam. It is in plain (tabby) weave. It is hoped a more complete report on this cloth will be published as an appendix to the excavation report.



ATTENBOROUGH HOARD, PLATE I



ATTENBOROUGH HOARD, PLATE II

# THE COINAGES FOR IRELAND OF HENRY VIII

MICHAEL DOLLEY AND W. D. HACKMANN

# (A) HISTORICAL BACKGROUND AND MORE PURELY NUMISMATIC CONSIDERATIONS

THE primary purpose of this paper is to subject to fresh examination a very considerable body of material brought together by the late Raymond Carlyon-Britton, and published by him in the Numismatic Chronicle for 1954. That study, however, was almost entirely epigraphical, and, as with so much of the work of amateurs of that generation, the author scarcely lifted his eyes to look beyond the relevant trays of his own cabinet. As far as its handling of the historical evidence is concerned, too, the 1954 paper represented no advance whatever on the truly excellent analysis of the English administrative records presented by Henry Symonds nearly forty years previously,2 and it is believed that until 1968 there existed no numismatist to whom it had as much as occurred that purely Irish narrative sources might have something to contribute to the solution of outstanding problems. Still more remarkable may be thought the failure of all students until now to pay any attention to the hoard evidence. It may be meagre, and in 1954 it undoubtedly seemed still more so, but even a nod in its direction would have been welcome. As it happens, too, the Courtown hoard discovered a whole century ago<sup>3</sup> in itself affords a pretty clear indication that the inception of the Anglo-Irish coinage of Henry VIII does not appreciably antedate the 1534 revolt of 'Silken Thomas'. What is perhaps even more surprising is that so little attention was paid by Carlyon-Britton to the silver content of a series of coins which is known to exhibit progressive debasement.

For all this, Carlyon-Britton's 1954 paper must be taken as marking the point of departure for any future study of the series. It was there argued, very largely on epigraphical and negatively historical grounds, that the issue of the 'harps' and 'half-harps' did not begin until c. 1533, that the initials on them—h 77, h \(\pi\), and h \(\mathbb{B}\)—reflect Henry VIII's successive marriages to Anne Boleyn, Jane Seymour, and Katherine Howard, and that h R coins fall into two groups, the earlier and smaller belonging to the period c. 1537-40 when Henry seemed genuinely to have mourned unlucky Jane, and the later to the period after the disgrace of Katherine Howard, Perhaps the chief novelty of Carlyon-Britton's paper, however, lay in its rejection of Symonds's primafacie slightly improbable attribution of the h \( \pi \) coins to the period of the allegedly unconsummated marriage with Anne of Cleves-there is some reason to think that the couple shared the same bed for at least one night. It may be as well, therefore, to begin this paper with one new piece of evidence which is probably conclusive that in the matter of the coins Carlyon-Britton was right and Symonds wrong. In the National Museum of Ireland there are two 'half-harps' which are from one and the same obverse die. The reverse of one of them exhibits the initials h 77, and of the other h £, and from the different states of the obverse die it is perfectly clear that the h \( \pi \) coin is the earlier striking. Subsequently Mr. W. A. Seaby has found a second die-link between h 7 and

<sup>&</sup>lt;sup>1</sup> R. Carlyon-Britton, 'Henry VIII Harp Groats and Harp Half-groats and Edward VI Harp Groats', *NC* 1954, pp. 134-40.

<sup>&</sup>lt;sup>2</sup> H. Symonds, 'The Irish Coinages of Henry VIII and Edward VI', NC 1915, pp. 192-229.

<sup>&</sup>lt;sup>3</sup> JRSAI viii (1864-6), pp. 521-3.

 $n \neq$  'half-harps' in the National Museum of Ireland and the British Museum, and the sequence must seem clinched by his further discovery that the  $n \neq$  'half-harps' are all from altered  $n \neq$  dies, the critical '\(\mathbf{E}'\) being punched in over the '\(\pi'\) in each case. It is for this reason that Mr. Seaby and I hope to publish very shortly in the *Numismatic Chronicle* a miniature *corpus* of every known specimen of the 'half-harp' of Henry VIII. As is well known, the saucy Anne Boleyn's disgrace was rapid, and the king's marriage to Jane Seymour followed in a matter of weeks. Between the demure Jane's death and the mockery of a marriage with Anne of Cleves, on the other hand, there elapsed a period of rather more than two years. Even if, then, the state of the obverse dies had not been decisive for the sequence, the very existence of these die-links in itself would have argued strongly for the attribution of the  $n \neq \infty$  coin to Anne Boleyn.

Carlyon-Britton followed Symonds when he relied very much on negative evidence from the records to support his case that none of the h R 'harps' are to be assigned to the last years of Henry's ill-starred marriage with Katherine of Aragon. He rightly remarks that from 1529 onwards the rupture was public. What does not seem to have been observed before is that this interpretation of the documents is more than borne out by a consideration of the coin-hoards. There are at least six, probably nine, and perhaps ten Irish finds1 which appear to end with 'Wolsey' coinage English pieces of Henry VIII and from which the 'harps' and their halves are absent. The five where we can be reasonably certain of the general pattern are in order of discovery the 1843 find from Derry which ended with 'Wolsey' groats but included earlier Anglo-Irish pieces,2 the 1847 find from Cloonsharragh on the Dingle peninsula where the coins seem all to have been English,3 the 1865 hoard from Courtown on the coast of Wexford which totalled some 460 coins, the latest that can be identified from Shearman's very perfunctory listing being a York groat with the initials of Cardinal Wolsey,4 the 1922 find from Ballyholme near Bangor in Co. Down which seems to have been composed entirely of lis-marked 'Wolsey' groats,5 and the 1951 find from Clooncarn near Mohill in Co. Leitrim which like the Courtown and Derry finds combined 'Wolsey' groats with earlier Anglo-Irish and English issues.6 Last but not least is the still unpublished 1948 hoard from Sligo Abbey composed entirely of English coins, the latest of them arrow-marked 'Wolsey' groats. Not one of these hoards is likely to have been concealed before 1530, and most if not all are probably to be associated with the Geraldine uprising of 1534—it will have been noticed that five are from the immediate vicinity of the coast. The two finds which probably conform to the same pattern are a major hoard from Malin in Inishowen in Co. Donegal found at an uncertain date before 1852,7 and a smaller find of 1847 from Clogheen in Co. Tipperary.8 More doubtful, perhaps, is an 1809 find from Downpatrick allegedly composed in essence of (English) groats of Henry VIII (and VII?) with a few of Richard III,9 though it receives substantial corroboration from the composition of a hoard discovered at an uncertain date before 1880 at Westport in Co. Mayo which runs from Henry VI to Henry VIII.10 These are ten of only eleven Irish hoards known to us which can be dated to the decade immediately following the great English recoinage

<sup>&</sup>lt;sup>1</sup> But see now Postscript (infra. p. 108).

<sup>&</sup>lt;sup>2</sup> UJA i (1853), p. 164.

<sup>&</sup>lt;sup>3</sup> NMAJ x. ii (1967), pp. 223-5.

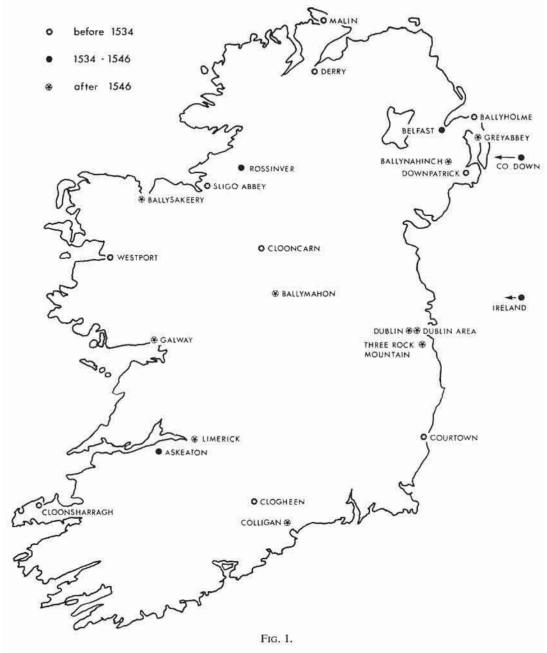
<sup>&</sup>lt;sup>4</sup> Supra, n. 3 p. 84. <sup>5</sup> NC 1966, pp. 217-19.

<sup>6</sup> NC 1969, pp. 219-21.

<sup>&</sup>lt;sup>7</sup> UJA i (1853), p. 167: JRSAI ii (1852/3), p. 290.

<sup>\*</sup> JRSAI iii (1854/5), p. 62. To this should now be added JBAA iii (1848), p. 333, see the Postscript, infra, p. 108.
\* NC 1966, p. 217.

Major Hay Sale (Sotheby, 8-13: iv: 1880), lot 605—we are indebted for this reference to Mr. H. E. Pagan, B.A.



of 1526, and the total<sup>1</sup> absence from them of the 'harp' and 'half-harp' struck expressly for currency in Ireland is solid evidence in support of Carlyon-Britton's arguments that the ħ H groats are to be associated with the flighty Katherine Howard and so have no connection at all with the tragic Katherine of Aragon whose travesty of a 'trial' dragged on until May 1533.

<sup>1</sup> But see now Postscript (infra, p. 108).

The eleventh hoard of this grouping is in some ways the most significant of them all. It is the sizeable 1954 hoard from outside Askeaton in Co. Limerick which is thought to represent a portion of the Geraldine treasure concealed at a time of internal strife within the House of Desmond just when the revolt of 'Silken Thomas' began to collapse.1 The hoard ends with a compact group of English half-groats from the archiepiscopal mints under Cranmer and Lee, pieces that are unlikely to belong much after 1534, together with a solitary 'half-harp'. This has the initials h T, and affords in itself a very useful indication of the place of the h \( \tau \) coins in the series as a whole. That the Askeaton hoard is to be associated with Desmond dissensions at the time of the Geraldine rising can scarcely be denied, and the absence from it of Anglo-Irish coins with the initials h R is nearly as good evidence that such pieces are to be given to Katherine Howard, as the presence of the h \(\pi\) coin is an argument against its attribution to Anne of Cleves. The latest English groats, it should be noted, have the initial mark lis, while the halfgroats are from the archiepiscopal mints and it seems inconceivable that the one Anglo-Irish coin in the find would belong a quinquennium and more later than anything in the rest of the hoard.

On the hoard-evidence alone, then, one could have been reasonably certain that the h n coins belong to the period of Henry's adulterous marriage with Anne Boleyn, and the h n coins to the heyday of Katherine Howard. It might be remarked in passing too that there is something very appropriate in the idea of Henry honouring Anne Boleyn by setting her initial on the earliest of his Anglo-Irish coins. The lady in question had Irish connections, and significantly they were with the Butlers, the hereditary enemies of the Geraldines. Nor, strange to say, does it appear to have occurred to numismatists that 1534 would have been a singularly appropriate time for Henry to have struck an Anglo-Irish coinage. The loyalty of Ormonde, Anne's kinsman, was critical for the success of the English arms, and there was always the problem of how Skeffington's soldiery was to be paid.

The attribution of the h R coins to Katherine Howard, on the other hand, does raise a number of problems. A minor difficulty, but one apparently that has not been remarked before, is that both the h and the h are crowned. Katherine Howard was never crowned queen, and indeed there is a tradition that her nagging of her husband on this score may have contributed to her ultimate downfall. A much more serious objection is that the h B 'harps' and 'half-harps' appear to be of precisely the same standard as all the other coins with the crown initial mark, i.e. were struck 10 oz. 2 dwt. fine. We have here our first conflict with the documentary evidence. Henry publicly married Katherine Howard on 28 July 1540, while there is an extant document dated 13 July 1540 which authorizes an Anglo-Irish coinage only 9 oz. fine. We find it impossible not to comment very adversely on the fact that Carlyon-Britton not only ignores the objection but seems to avoid it by silently emending the date of the document to 13 July 1541. This emendation<sup>2</sup> proves to be entirely unwarranted. To begin with, the document in question forms an integral part of the Patent Roll of 32 Henry VIII, so that the 13 July in question can only be that which falls between 22 April 1540 and 21 April 1541, i.e. 13 July 1540. There is further corroboration, too, in the actual wording of the document which speaks of Henry's 'Dominion of Ireland'. On 19 June 1541 Henry had gone to very great trouble to have himself proclaimed in Dublin King instead of Lord of Ireland, and

<sup>&</sup>lt;sup>1</sup> BNJ xxxvii (1968), pp. 85-92,

<sup>&</sup>lt;sup>2</sup> Op. cit., p. 139, line 9.

a document relating to Ireland uttered the following month would surely have described Ireland as a Kingdom and not a Dominion.

A second document adds to the confusion, and the more so because unlike that of 13 July 1540 it was not a confidential instruction but a public announcement. This is the proclamation of 19 November 1540 which prohibited the import of the 'harps' into England. Granted that when first struck the Anglo-Irish pieces in question had been inferior in standard to their English counterparts, and had continued so ever since, it is not obvious why this sudden concern on the part of Henry after the lapse of six or seven years. There is another difficulty. There exist in considerable quantity trefoilmarked h R 'harps' which appear to be notably baser than the crown-marked coins but which retain the DOMINUS title. Brooke in 1923 saw the problem very clearly, and his solution was to date the alteration of style from DOMINUS to REX 'not earlier than May 1542',1 though it can fairly be claimed that he did not attach nearly enough importance to the events in Dublin of June 1541. The Irish student in particular is reluctant to accept the improbability of an arrangement of the material which asks us to believe that Henry was proclaimed King of Ireland with the maximum of ostentation, while successive consignments of literally brand-new coin from London continued to accord him the inferior title which implied his subordination to the Pope. Leaving aside the fact that the Supremacy issue in Ireland was a very live one, Henry was faced with the no less real problem that it was being represented in other quarters that the title of King of Ireland had not been assumed by him in virtue of his Kingship of England, but had been conferred upon him by the Irish Parliament. It is hard indeed to decide which would have been the more obnoxious to the Tudor sovereign at this juncture, the suggestion that Ireland was a Papal fief and liable to reversion on that account, or the innuendo that the Dublin Parliament had the Kingship in its gift,2 and we find it frankly inconceivable that the English king would have allowed a situation where his documents and his coins appeared to speak with two voices.

That the trefoil-marked 'harps' immediately follow the crown-marked cannot seriously be doubted, and Carlyon-Britton has provided convincing evidence from mules and from epigraphy. It may be as well, though, to cite a piece of hoard-evidence which affords welcome corroboration, the 1949 Rossinver hoard from Co. Leitrim with its nine harps, seven with initial mark crown and two with initial mark trefoil.3 One of the trefoilmarked 'harps', incidentally, has the style DOMINUS, while the other reads REX. Mr. W. A. Seaby, too, when classifying the Ulster Museum's 'harps' by their initial marks in connection with Mr. Hackmann's investigation has noticed a chain of die-links which would by itself surely be sufficient to establish the position of the h H mark 'late' within the currency of the crown initial mark. The broad sequence only had already been suggested to him by the writer of this paper who had observed that the shield on the h T and h ± 'harps' virtually never touches the inner circle in the top half of the coin, whereas on later pieces it almost invariably breaks it. Both Mr. Seaby and the writer, too, had noted independently the quite different punches of the 'early' and 'late' lis occurring in the English coat of arms, the original punch being the poorer. Mr. Seaby's chain of die-links begins with a coin from the Geddes collection which has the crown

<sup>1</sup> NC 1923, p. 269.

<sup>&</sup>lt;sup>2</sup> It is unfortunately characteristic of the 1954 paper that no mention is made of even so fundamental a

work for the interpretation of the period as R. Dudley Edwards, *Church and State in Tudor Ireland* (London, 1935).

<sup>a</sup> NC 1969, pp. 223-5.

mark both sides and the initials ħ ħ. It is from the same reverse die as a 'mule' with a trefoil obverse in the Carlyon-Britton collection and another crown-marked obverse die in the same cabinet which exists in two states. The later state, also ex Carlyon-Britton, has a trefoil mark punched in over the crown, and is found with an ħ ħ trefoil reverse which in turn occurs on a coin in Dr. R. S. Agnew's cabinet with an original trefoil-marked obverse die. Mr. Seaby, too, would be the first to suggest that the ramifications of this particular chain may be very much wider. An important factor that does not seem to have been appreciated by any of our predecessors is that the trefoil-marked coins are notably less fine than those with the crown mark. Regrettably and perhaps significantly there appears to be no published assay, but the evidence obtained from densities established under laboratory conditions allows of no other conclusion.¹ The obvious inference would be that these are the 9 oz. coins struck in accordance with the warrant of 13 July 1540, but there are chronological difficulties. Since they read both DOMINUS and REX it must be during the currency of the trefoil mark that the royal style was changed. None, too, have the initials of Katherine Howard.

For Brooke there was no problem. He disregarded for practical purposes the document of 13 July 1540 authorizing a less fine coinage and also the proclamation of 19 November 1540, which suggested that a reduction in fineness was imminent if not already effected. Katherine Howard was suddenly disgraced in November 1541, and we may fairly suppose that the most distinguished of English numismatists of his day would have argued that the trefoil-marked coins with DOMINUS belong to the first months of 1542 and those with REX fall after the May of that year. Carlyon-Britton, on the other hand, seems to have sensed the importance of the events in Dublin in June 1541, but does not face a very real problem. Katherine Howard was still in favour in the autumn of 1541, several months, that is, after Henry was proclaimed King of Ireland, but her initial has vanished from the coins. At first sight it may seem that Brooke is more likely to have been right, but as has been known on other occasions it is Carlyon-Britton who appears to have been nearer the correct answer though for quite the wrong reasons!

It was Whitton, that outstanding authority on the English coinages of Henry VIII, who put his finger on Brooke's Achilles' heel where documents were concerned, his failure to distinguish a private instruction from a public proclamation.<sup>2</sup> More recently Mr. Challis has echoed Whitton's appreciation of Fevearyear's instinctive grasp of the principles of debasement, while more than sharing Whitton's mistrust of Fevearyear's mathematics.<sup>3</sup> As regards the English coinages of the years 1542–4, it now appears that coin could be and often was struck and stockpiled. Finenesses were the subject of confidential instructions though public proclamations might be designed to bamboozle if

2 infra. Rather they are a tribute to the technical skills of the men entrusted with the manipulation of the coinage.

<sup>8</sup> C. E. Challis, 'The Debasement of the Coinage, 1542-1551', *Economic History Review*, 2nd series xx. 3 (1967), pp. 441-66.

<sup>&</sup>lt;sup>1</sup> Infra, p. 104. Four coins with this mark were examined spectrophotometrically in the Analytical Laboratory of the Department of Chemistry in the Queen's University of Belfast and the silver content of the surface estimated to be 94-47, 94-38, 89-76, and 89-45 respectively. The method is of limited value, however, as it is known that surface enrichment was artificially induced by 'pickling' in vinegar, while there is the further problem of differential loss by wear. Certainly these spectrophotometrical findings do not impugn the validity of the picture presented in Table

<sup>&</sup>lt;sup>2</sup> C. A. Whitton, 'The Coinages of Henry VIII and Edward VI in Henry's Name', *BNJ* xxvi. i (1949), pp. 56–89: ii (1950), pp. 171–212: iii (1951), pp. 290–332; and on this aspect particularly pp. 59–62.

the case demanded it. We believe that due weight should be given not just to the warrant of 13 July 1540 and but also to the proclamation of 19 November following. The key to the problem is Katherine's non-coronation. Her husband simply changed his mind. The h R 'harps' and 'half-harps' were struck and put into issue before the king decided that a coronation would not be desirable. They may even have been struck before the warrant of 13 July 1540. If it was very probably not Henry who had deflowered her, Katherine almost certainly slept with her royal mate several weeks if not months before she publicly married him. What we believe, in fact, is that the crown-marked 'harps' and their halves came to an end in the winter of 1540/1, and were followed immediately by the baser trefoil-marked 'harps' foreshadowed by the secret instruction of the previous July and by the public ban on import into England of the intervening November. Katherine may or may not have had brought to her notice the disappearance of her initial from the Irish coin, but it does seem only too likely that any annoyance was swallowed up by her bigger disappointment concerning the English coronation. If she raised the question of the coins with her husband, is it too fanciful to suppose that he laughed it off with a remark that his sweet's name was not to be associated with baseness, even perhaps emphasizing the last word by a playful smack on her bottom? It would have been in keeping with what we know of the two of them.

By this arrangement of the coins the integrity of the historical evidence is preserved. The instruction of July 1540 and the embargo of November 1540 fall naturally into place, and from July 1541 Henry is proclaimed King of Ireland on his Anglo-Irish coins as well as by his Irish subjects. The price paid is a small one. All that has to be conceded is that a consort cheated of a coronation had to swallow her initial vanishing from a coinage the currency of which in England was strictly forbidden, a coinage which she may well have never seen! For us, then, trefoil is a mark which essentially is associated with the year 1541, and we would go on to suggest a further reason why we opine that Brooke cannot be right when he implies that it lasted at least until the autumn of 1542. The next fixed point in the Anglo-Irish series is the issue with lis as initial mark and a reverse legend ending REX 37, and few would wish to deny that these coins are those of Henry's thirty-seventh regnal year which began on 22 April 1545. Before them, however, there must be fitted in all the coins with the following marks, rose, lis, and lis/REX s, a close fit for a period of at most thirty months—to be stressed is the fact that the REX trefoil-marked 'harps' are relatively common, and that Brooke placed the change on the Anglo-Irish coins from DOMINUS to REX 'not earlier than May 1542' and obviously hankered after the summer. Clearly an arrangement which brings back to the summer of 1541 the change from DOMINUS to REX is going to give very much more room for manœuvre.

Carlyon-Britton's suggestion was that the sequence of marks after trefoil is lis, rose, lis/REX s, lis/37 and 38. In this he was clearly influenced by the existence of trefoil/lis and lis/trefoil mules alongside rose/trefoil but not trefoil/rose pieces. The hoard-evidence is not very helpful, the only hoard that seems relevant being a small find of unknown provenance which is preserved in the National Museum of Ireland.¹ Four English groats have the marks portcullis (First Coinage), rose, lis and arrow, while the eight 'harps' have the marks crown (h \(\pi\)), trefoil (4—all, strange to say, reading DOMINUS), rose (2) and lis. All that is indicated really is that the REX s coins immediately precede

the REX 37, a conclusion at which the numismatist would have had little trouble in arriving on quite other grounds. The real problem is the position of the rose-marked coins, and it may be recalled that Symonds had had two of them assayed with quite sensational results. The figures he obtained were 10 oz. 3 dwt., which suggests a return to the 10 oz. 2 dwt. standard which had obtained between 1534 and 1540, and—allegedly—10 oz. 11 dwt. 12 grs., which ought to indicate an attempt at a coinage in sterling silver, but which we feel is more probably a misprint for 10 oz. 1 dwt. 12 grs., in which case the first assay is corroborated. Certainly our experience with densities would not suggest that the rose-marked coins were finer than the crown-marked coins which begin the series.

Symonds believed that the undifferenced lis-marked coins represent the 8 oz. fine coinage of 1544, and this is a view with which we entirely concur. It is borne out by the assay which he had had made (8 oz. 4 dwt.) and our own estimates based on densities argue that the lis without s or date is the mark for 1544. We do not think it likely that the trefoil mark extended from 1541 until 1544, and for their different reasons both Carlyon-Britton and Brooke would probably have agreed with us on this point. The former obviated the difficulty by ignoring altogether Symonds's argumentation, while the latter would doubtless have adduced it as one of the more cogent reasons for his opinion that the change from DOMINUS to REX did not take place before 1542. If, on the other hand, undifferenced lis is as late as 1544, clearly there is no place after it for rose and lis/REX s before the lis/REX 37 coins which must represent the coinage of 1545. All these difficulties melt away if we bring the rose mark back to 1543 and intercalate it between trefoil and undifferenced lis. Moreover, this arrangement is borne out by the evidence of the stops. On crown-marked coins saltire stops are universal. In trefoil we find for the first time a small proportion of slipped-trefoil stops, but in rose the proportion of slippedtrefoil stops rises dramatically. After this one is not surprised to find that on lis-marked coins saltire stops are never found. Further support for this natural sequence comes from the mules. No mule between lis and rose is known, and only one mule between trefoil and rose, but mules between trefoil and lis are quite common. Patently the rose mark indicates coins of a higher standard than those that had come before or were to come after, and the coins are not all that common. When the issue was discontinued, the dies were withdrawn and presumably destroyed. Since, however, both trefoil- and lis-marked coins appear to have been struck relatively base—at least by the standard of the crownmarked coins—there was no reason at all why Tudor instincts for economy should not have been allowed to assert themselves, and the obsolete dies used in combination with the new.

We have remarked that the rose mark is not all that common. Those who have worked with the series will be only too aware of this, and there is a further argument based on the literary evidence. As late as 1642 we find a distinction drawn in the sources between the DOMINUS and the REX 'groats', and the rough-and-ready dichotomy between 'finer' and 'baser' would have lost its essential validity if the number of trefoil-marked 'harps' reading DOMINUS or of rose-marked 'harps', all of course reading REX, had been particularly large.<sup>2</sup> Again, too, we may profitably look across to the English series. After 1544 the English silver was progressively debased, the first debasement in May of that year being from 11 oz. 2 dwt. to 9 oz. fine. Patently it would be an absurdity for the

Anglo-Irish coinage, since 1534 always notably baser than its English counterpart, to be even as good as the new pieces, and our suggestion is that the lis mark in that year is common to both series, denoting a 9 oz. fine English and an 8 oz. fine Anglo-Irish standard. The small issue of rose-marked 10 oz. 2 dwt. fine Anglo-Irish 'harps', on the other hand, represent precisely the same camouflage for the impending debasement as the limited number of 11 oz. 2 dwt. fine lis/pheon and pheon/lis English groats which Whitton believed were struck between 1542 and 1544 to 'maintain the appearance of legality'. The exact parallelism is one that we must confess to finding completely convincing.

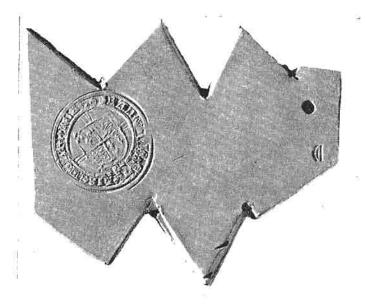


FIG. 2.

It is at this point perhaps that there is best considered a piece of potential evidence entirely neglected hitherto by writers on the Anglo-Irish series. This is the trial-plate preserved in the Royal Mint which appears to be intended for a coinage 9 oz. 6 dwt., fine. From the accompanying text-block (Fig. 2) it should be clear that Dr. J. H. Watson's comment 'The impression on this plate is badly struck and is probably that of a groat reverse' ranks as an understatement. The reverse legend is indeed that of an Anglo-Irish Rex 'harp' but is broken up by the cross of the type which as on English groats extends beyond the inner circle. Moreover, the type as opposed to the legend is that of the obverse of the 'harp' but considerably modified. The initial mark is apparently lis, and the stops saltires. Thus it cannot be associated with the lis-marked 'harps' of 1544 for there the stops are invariably slipped trefoils, and our belief is that it belongs to the furtive years 1542–5 when Henry and his advisers were plotting and scheming without at first perhaps any too clear idea of where they were going. Nor are we satisfied that the piece is a pattern for an Anglo-Irish as opposed to an English coinage. By the time

<sup>&</sup>lt;sup>1</sup> J. H. Watson, Ancient Trial Plates (London, 1962), p. 51.

that the Irish REX title began to find its way on to the coins, the Anglo-Irish series had already been debased to 9 or 8 oz. fine, and even if this had not been the case we feel that the step down from 10 oz. 2 dwt. to 9 oz. 6 dwt. would be one too marginal to be at all plausible. It is much more likely in our opinion that the plate should be interpreted as an experiment in connection with the English coinage c. 1542 when consideration was having to be given not just to the problem of debasement but also to the question of how Henry's recent assumption of the Irish kingship could best be proclaimed on his English coins. It should not be forgotten that until now the obverse legend of his English groats had not extended beyond his English and French titles, a situation that had become anomalous with the elevation of the Irish lordship to equal status. There is one little detail, too, which may be thought to clinch our attribution of the trial-plate to the English series. In the forks of the dislocated cross-ends which divide up the legend are saltires, one of the characteristics of the English coinage of 1526-44.

While on this subject, incidentally, we may put on record our verdict on two other trial-plates which Dr. Watson has suggested may belong to the Anglo-Irish series. Both are without impression or inscription, and a piercing might suggest that both originally were fastened by sealed cords to handwritten certificates. One such certificate has survived, and there is a tradition that it had been attached to the finer of the two plates. The fineness is just over 10 oz. which would fit very well the Anglo-Irish series between 1534 and 1540, but the now virtually illegible certificate is supposed to have been dated '13th October 18th Henry VIII', i.e. 13 October 1526. Needless to say we cannot accept that the Anglo-Irish coinage of this reign began so early, but those familiar with Roman numerals will know how easy it would be to confuse xviii with xxvi which would make the date 13 October 1534, a plausible date for the missing authority for the coinage concerned. However, pending a new consideration of the document as a whole, any interpretation of the date and purpose of the trial-plate must be thought dubious, but we do not mistrust Dr. Watson's suggestion that it is one of three pieces identified as Irish in a century-old Report of the Trial of the Pyx. Our quarrel would be with the validity of the 1866 identification which we suspect to be unduly influenced by a rather John-Bullish assumption that pieces not of sterling ought not to be English. The second of the two plates approximates to 9 oz. fine, a standard which could be that of the trefoilmarked 'harps' of c, 1540-2 but which is also incontrovertibly that of the English silver coinage of 1544. While, then, we would not exclude the possibility that the trial-plates are to be associated with the Anglo-Irish series, we are far from considering the association proven.

After this digression, we may perhaps return to the actual coins. There remain to be considered the lis/REX s issue and the dated series from 37th and 38th years of the reign. Again there seem to be no published assays to guide us, but a consideration of the densities recorded is sufficient to show that they were struck on at least two different standards. The fundamental division is between the lis/REX s and lis/37 coins on the one hand and the Sharington-marked 38 coins on the other. The slump is too pronounced to be coincidental, and it is at this point that we may with profit consult the Irish sources which until now have been virtually ignored by those writers who have concerned themselves with the 'harps'. For this period the so-called *Annals of the Four Masters* are extremely detailed, and they have the particular value of having been compiled in most

<sup>1</sup> Op. cit., pp. 47 and 49 and facing plates.

cases from near-contemporary annals only ninety years or so after the events described. The annal for 1545 includes the following which is here quoted in O'Donovan's well-known Englishing: 'Great dearth in this year, so that sixpence of the old money were given for a cake of bread in Connaught, and six white pence in Meath.'

This is thought to be the earliest reference to the so-called 'white money', a term that for the rest of the century characterized base coins of no more than 4 oz. or even 3 oz. fine,2 and it could even be argued that whatever coinage we attribute to Ireland for 1545 should not be any finer. However, the discrepancy between the figures for the lis/37 and Sharington-marked/38 groats is one so substantial that we do not believe that it can be accounted for by a fall in the fineness of only one ounce, and, at least pending a series of assays of the lis/REX s and lis/37 'harps', our inclination is to suggest that the upper limit of fineness of 'white money' may have been in the region of 6 oz. In this connection it is interesting to recall that Symonds believed that the weight of the evidence of the English records favoured the view that there was in 1545 a coinage of 'harps' 6 oz. fine. What has still to be satisfactorily explained, though, is the significance of the s on the lis/REX s coins. Symonds ignored the problem, but Carlyon-Britton suggested that it might be the Southwark mint-mark even though the lis mark at the head of the legend is one peculiarly associated with the Tower establishment.3 There is one major difficulty here in that Carlyon-Britton himself and rightly had placed the lis-REX s coins before the lis/REX 37 pieces. It is fairly certain that the Southwark mint did not open until 1 July 1545 whereas the 37th regnal year had begun some ten weeks before that.4 One solution would have been to place the lis/REX s coins after instead of before those with the date, and certainly the densities we have recorded, though in reality too few to be reliable, could be bent to support such an arrangement. The sequence in this event would have entailed the production of the Anglo-Irish coinage having been switched from the Tower to Southwark in the summer of 1545 before being finally transferred to Bristol in 1546. However, we remained convinced that s was not a Southwark mark, and felt that it would be dangerous to postulate a presumed and entirely hypothetical 5 oz, or 4 oz, fine coinage for Ireland in the second half of 1545 without the support of several properly conducted assays. As is remarked later in the paper, the evidence of a small number of densities can be very misleading, and our misgivings may be thought to be abundantly vindicated by another discovery of Mr. Seaby's. In the Ulster Museum, ex Carlyon-Britton, is a lis/lis 'harp' from the same obverse die as a coin from the Belfast Natural and Philosophical Society's old cabinet which has the REX s reverse. In other words, the REX S coins precede and do not follow the REX 37 issue.

The Sharington-marked coins of the 38th regnal year are firmly associated with the Bristol mint and with 1546. From the mint-records, and here there is corroboration from an assay published by Aquilla Smith some ninety years ago, we know that the fineness was no more than 3 oz. In other words, the tradition was continuing that the Anglo-Irish coins should be at least an ounce baser than their English counterparts. They were the worst coins with which an English mint had yet been associated, and for the second time we may turn to the *Annals of the Four Masters*. Under the year 1546 we find the following, again in O'Donovan's Englishing: 'New coin was introduced into Ireland,

<sup>&</sup>lt;sup>1</sup> J. O'Donovan (ed.), The Annals of the Four Masters (Dublin, 1848-51), vol. v, pp. 1492 and 1493.

<sup>&</sup>lt;sup>2</sup> BNJ xxxvi (1967), pp. 118-21.

<sup>3</sup> NC 1954, p. 138.

<sup>&</sup>lt;sup>4</sup> The date for the opening of Southwark is accepted by Challis, op. cit., p. 460.

i.e. copper; and the men of Ireland were obliged to use it as silver.' Clearly the new coins were being shipped over to Ireland as soon as they left the mint, and Bristol was of course admirably sited for their dispatch as well as for their production. With the Sharington-marked/38 'harps' Henry VIII's Anglo-Irish coinage comes to a dismal finish, but mention may just be made of the last of the 'harps', the Sharington-marked pieces without date which appear to end the series and which have been associated very plausibly with the period of Sharington's malversations in the early months of the reign of Edward VI.

Also for the sake of completeness there can be included at this point a brief survey of the rest of the hoard-evidence relating to the Anglo-Irish coinage of Henry VIII, and again it is convenient to take into account those Irish finds which are on record as including Anglo-Irish and/or English coins of Henry or struck in Henry's name. Already cited in this paper has been a total of ten finds from which the 'harps' appear to have been absent, and three which are known to have contained one or more of the 'harps' and/or their halves.2 To these we may now add another thirteen hoards including one or more Anglo-Irish coins in Henry's name. They begin with a tantalizingly ill-recorded discovery made in 1840 near Belfast which appears to have consisted of 'harps' alone, the estimate of 'several ounces' suggesting that fifty or sixty of the coins were present.<sup>3</sup> A hoard of much the same order is one made 'some years' before 1923 at an unknown spot in Co. Down.4 Here the Anglo-Irish element was composed of a solitary 'threecrown' groat from the previous century, and no fewer than 40 of the 'harps'. Brooke has recorded the initial marks—but not the weights or readings—as follows: initial mark crown, 19 (h 7 6, h f 7, h h 4, h R 2); trefoil/crown mule, 1; trefoil 10 (DOMINUS 4, REX 6); rose, 2; lis, 6 (including lis/REX s?); lis/REX 37, 1; Sharington-mark/REX 38 1. The dozen English coins range from light groats of Edward IV to a Bristol groat of 1546, and there was also a double patard of Charles the Bold. As regards the Anglo-Irish issues down to and including the lis mark, the hoard is perhaps a pretty fair index of comparative rarity for the different marks, but it is of no real service in establishing the chronology of the last marks of the reign which are patently under-represented. Of the same period apparently is a find made before 1832 in the River Poddle at Dublin which included at least four of the basest 'harps', one at least with Sharington's initials.5 Two more finds from Co. Down appear to be of somewhat later date, a discovery made at Grey Abbey in or shortly before the year 1812 which had three of the 'harps' and three of the base coins, one of them English, of Edward VI in Henry's name,6 and a discovery made at Ballinahinch in or shortly before the year 1818.7 This is supposed to have consisted of nineteen groat-sized coins, but unfortunately only three are described, one 'harp' with the REX title, and base groats from Dublin and from Bristol, the first certainly and the latter probably struck under Edward VI though still in Henry's name. More substantial but rather later in date are two hoards from Leinster, the 1840 find from Ballymahon in Co. Longford where 'harps' are not recorded but all four of the denominations struck at Dublin by Edward VI in Henry's name, together with English coins of Edward VI and of Philip and Mary, and the 1849 discovery on the Three Rock

<sup>&</sup>lt;sup>1</sup> J. O'Donovan, op. cit., vol. v, pp. 1498 and 1499.

<sup>&</sup>lt;sup>2</sup> Supra, pp. 85-6 and 87-90.

<sup>&</sup>lt;sup>3</sup> UJA i (1853), p. 166.

<sup>4</sup> NC 1923, pp. 260-9.

<sup>5</sup> RIA MS 24/H/9, f. 19v.

<sup>6</sup> UJA xxi (1958), p. 98.

<sup>7</sup> NC 1966, p. 217.

<sup>&</sup>lt;sup>8</sup> UJA xxx (1967), p. 90.

Mountain near Stepaside in Co. Dublin which began with twenty-four undated 'harps' together with no fewer than fourteen of those dated by the regnal years 37 and 38, but continued with later and in some cases finer pieces at least as late as 1557. To this same period we should probably ascribe a fairly substantial hoard now in the possession of a Dublin collector and believed to have been found some few years back in the area of Co. Dublin. Here late 'harps' were present along with the 'sixpences Irish' struck at Dublin in Henry's name, and the base issues of the succeeding reigns.

This review of the hoard-evidence for the Anglo-Irish coinages of Henry VIII and of Edward VI in Henry's name ends with four hoards which more than bear out Fynes Moryson's well-known account of the quite extraordinary farrago of obsolete coin current in Ireland at the end of the sixteenth century. Earliest in point of date is the 1841 find from Colligan near Dungarvan in Co. Waterford, a hoard of some hundreds of coins which began with an Anglo-Irish groat of Edward IV and ended with English coins of Elizabeth running down to 1580.3 This find included at least three of the 'harps' but unfortunately we are not given the initial marks but only the not very helpful information that the letters flanking the harp are h R. Probably of the same period is the 1921 hoard from Limerick which contained sixteen Anglo-Irish coins, the earliest of them a 'harp' described as of Henry's 'second' coinage (n R?) and the latest of Elizabeth, and six English pieces beginning with Mary and ending with two sixpences of Elizabeth. one dated 1573 and the other with the date illegible.4 Even more impressive in its way is the find that came to light in or about the year 1950 at Ballybrooney south of Killala in Co. Mayo.5 Of the forty-two coins, twenty-nine are English, a 'Wolsey' groat of Henry VIII and a shilling and twenty-seven sixpences of Elizabeth running down to 1590, while the remaining coins are all DOMINUS 'harps' ('dominick grotes') of Henry VIII. Of these six have the crown initial mark (n 72, h ± 3, h H 1), and seven, including two mules, the trefoil (all reading DOMINUS). The hoarder was clearly one who knew the silver content of his coins, but the most striking illustration of the persistence of the DOMINUS 'harp' is afforded by the 1904 find from Galway city the concealment of which was almost certainly occasioned by the Cromwellian siege of 1651-2.6 The hoard ends with a sun-marked half-crown of Charles I but begins with two of the 'harps', both of them crown-marked and both with the initials n T. Both coins, too, exhibit remarkably little wear, and it is clear that their owners down the years had valued them for their relatively high silver content.

This brings to an end the first section of the present paper. In the course of it an attempt has been made to bring together and to reconcile the evidence of the documents and of the coin-hoards with that provided by examination of the actual coins. The arrangement is not perhaps all that different from that proposed by Carlyon-Britton, but eliminated at last are certain discrepancies between coins and archives which the English numismatist may be thought to have been just a little too prone to gloss over if not entirely to ignore. The testimony of the *Annals of the Four Masters* does seem for practical purposes both novel and valuable, and the mustering of the hoard-evidence entirely original if in many cases very largely vitiated by inadequacies of the written record.

<sup>1</sup> SNC lxxvii (1969), pp. 274 and 275.

<sup>&</sup>lt;sup>2</sup> Early publication is promised.

<sup>&</sup>lt;sup>3</sup> NC iv (1841/2), pp. 208-11: R. Sainthill, Olla Podrida, i (London, 1844), pp. 386 and 387.

<sup>4</sup> Antiquaries Journal ii (1922), p. 56.

<sup>5</sup> NC 1969, pp. 227-30.

<sup>&</sup>lt;sup>6</sup> In process of publication, cf. NC 1967, p. 216.

From all this there emerges a more or less absolute chronology which may be summarized something as follows:

i.m.	crown,	initials	hT.	readin	g DOMINU	s 1534/5
,,	**	,,	h I,	,,	,,,	1536/7
**	,,	**	hH,	27	11	1540
33	**	22	hR,	22	333	1540
**	trefoil	2.5	27	22	,,	1540/1
22	32	22	22	**	REX	1541/2
"	rose	23	22	13	"	1543
22	lis	57	55	**	33	1544
27		22	22	22	REX S	1544/5
17	22	,,	**	,,	REX 37	1545/6
22	WS	>>	**	22	REX 38	1546/7
			59	22	REX	1547

Much more work will have to be done on the series, and especially a die-study of the coins and a review of the repeated references to the striking of 'harps' in the State Papers from 1540 onwards, but dare one suggest that it is perhaps unlikely that any of the datings here proposed will be found to be more than a few months wide of the mark?

M. D.

# (B) THE DETERMINATION OF THE SPECIFIC GRAVITIES OF THE COINS IN THE ULSTER MUSEUM

In April 1967 Mr. Dolley approached me with a project involving the specific gravity determination of 167 Henry VIII 'harps' and 'half-harps'. I became very interested in this as I had for some time wondered about the value of specific gravity (s.g.) determinations of ancient binary alloys. The basic principle of this method is that a solid will lose a certain amount of weight when placed in water, and this is proportional to the amount of water displaced. Thus, s.g. or, more appropriately, relative density, is really an arbi-

trary unit—a ratio—obtained by the density of a substance density of water

The great advantage of this method is that it is simple and causes no damage, and these are perhaps two reasons why it might become dangerously popular in numismatics where non-destructive methods for the determination of the major constituents are so avidly sought after. There are, however, great drawbacks to it as an analytical procedure, and these must certainly be kept in mind when the numismatist wants an accurate determination as, for example, when he wants to discover to what part of a reign a given coin belongs.

- By using a standard procedure I tried to discover:
- (a) the accuracy of my s.g. determinations;
- (b) to what extent the numismatist can place his faith and conclusions upon this method.

A certain amount has been written on this subject and two of the main authorities are Professor E. R. Caley¹ and K. Karmarch.² The former discovered that fairly accurate

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<sup>&</sup>lt;sup>1</sup> E. R. Caley, Analysis of Ancient Metals (New York, 1964), chapter iv: idem, 'Estimation of Composition of Ancient Metal Objects', Analytical pp. 565–73.

Chemistry, xxiv (1952), pp. 676–81.

<sup>2</sup> Dinglers Polytechnische Journal, 204 (187)

results could be obtained with modern silver coins, but that the estimation of the Ag ('A') content of ancient silver coins was somewhat less accurate, even though the coins might be almost completely free of surface corrosion products. There seems to be very little difference in s.g. results obtained from silver coins containing a superficial translucent coating of silver sulphide (Ag<sub>2</sub>S), but it is very difficult indeed to obtain any sort of accurate result when the Ag content is below 50 per cent as there is then the likelihood of there existing such factors as internal corrosion products, metal porosity due to the leaching out of some of these corrosion products by the action of ground water, or a thick surface coating of silver sulphide, silver chloride (AgCl), or copper mineral corrosion products resulting from a high copper content as is usually the case with very base silver coins. Here the likelihood is that the s.g. obtained may even lie below that of copper! The reason for this is fairly obvious, for such corrosion products of low density inevitably give a result on the low side. Thus, in the above instances, a quantitative estimation can only be worked out by s.g. and complete chemical analysis together. Only this procedure will indicate the degree of porosity and the proportion of internal corrosion.

Professor Caley has established empirically that in the case of silver, an s.g. of below 10.00 for an *uncorroded* object will not give accurate results. If one looks at the specific gravities given in the following tables one realizes that most of the figures are below 10!

Another set of errors results not from the condition of the coin but is inherent to the method. 'Drag' on the suspension wire due to surface tension will be the cause of the main inaccuracy. From Professor Caley's table¹ we see that the effect of an error of 1 mg in measuring the weight of a 10 gm 72 per cent silver coin in water will cause an error of approximately 0.6 per cent, whilst, if the same coin's weight was only 1 gm, the error would increase to about 6 per cent. Other inaccuracies are caused by the formation of minute air bubbles on the surface of the coin whilst in suspension in the water, impurities in the silver alloy such as Pb (lead), or improper handling of the whole procedure. It must be kept in mind that because of the small size of the coin, and the closeness of the s.g. of Ag (10.50) to that of Cu (8.90) only 16 units of 0.1 each, a small change leads to a large difference in s.g. Thus a small inaccuracy due to perhaps a little bit of carelessness will lead to a totally different percentage.

The procedure which I worked out was simple and had therefore the merit of being easy to reproduce and to use as a standard for this number of coins which of course could not be processed in a few days. It was as follows:

- (i) The coins were degreased in acetone. At one time only those which were going to be weighed immediately were cleaned in this way. It should be noted that I completed the weighings of as many coins as practicable in one day, so as to get the most uniform conditions possible.
  - (ii) The coins were dried in a warm oven (±55 °C) for five minutes.
- (iii) Weighing the coin in air using an 'Oertling R20' electric balance capable of weighing to four places of decimals (in grams) came next. Obviously it would have been more in keeping with the overall accuracy of the methods adopted to go no further than two places of decimals, but it was felt that the refinement constituted a useful discipline.
  - (iv) A thin copper suspension wire was prepared. It was weighed in air and then in

distilled water before commencing each batch of coins. A few drops of Lissapol (wetting agent) were added to eliminate some of the 'drag' on the wire as it reduces the surface tension of the water.

- (v) The coin was next weighed in freshly boiled distilled water using the suspension wire (iv), and the correct result obtained by subtracting the weight of the wire in distilled water from the weight of coin and wire combined. The distilled water has to be freshly boiled to expel any oxygen dissolved in it.
- (vi) From these results the s.g. can be worked out either by using a graph or by using Caley's ideal mixture formula. As a calculating machine was available I preferred using the formula, for from it results to several decimal places could be obtained accurately and easily.

This empirical formula was obtained by Caley from his own data and that of Karmarch:

$$%Ag = \frac{10.50 D_x - (10.50 \times 8.90)}{10.50 D_x - 8.90 D_x} \times 100,$$

where Dx is the s.g. of the unknown Ag/Cu alloy,

or 
$$\frac{\text{s.g. of pure Ag} \times \text{number of units of alloy above Cu}}{\text{s.g. of alloy} \times \text{number of units of Ag above Cu}} \times 100.$$

However, one must remember that this 'ideal formula' has assumed the alloy to consist of <u>pure</u> silver and of <u>pure</u> copper and therefore does not take into account corrosion products and metallic impurities.

All my readings were made at 21 °C, for this was the room temperature of the laboratory, and as I was taking my measurements over a large time period, it was better to have the water at this constant temperature, although all E. R. Caley's determinations were conducted at 25 °C. The tables as supplied by C. D. Hodgman¹ give the specific gravities of the elements at varying temperatures. At 20 °C copper is given as 8.89 (the s.g. in fact varies for wrought copper between 8.85 and 8.95; and for cast between 8.30 and 8.95, while for annealed at 20 °C it is roughly 8.89), while silver when cast has a s.g. varying between 10.42 and 10.53, and one when wrought in the region of 10.60. In any case, because of all the inherent inaccuracies in the system, readings are only valid to the first decimal place, and thus my computations to four and two decimal places do not really increase the accuracy of my final results.

From the table one can infer that the correlation between coins and corrosion products alone is not enough to cause the inaccuracies involved. In fact most of the coins were in good condition and thus sulphide films were found both in the top and bottom end of the table. It would seem that all the results tend to be lower than they ought to be. When the s.g. is over 10.00 and we are to assume that the coins should have reached 833 fine, although of course there is no reason for this assumption judging from these s.g. determinations alone, the overall error is  $\simeq 5$  per cent (average 77% Ag). This error increases the smaller the silver content owing to the factors already described. It is interesting to note that a copper forgery reached only 8.15, and as it should have been 8.90 if pure copper, the inaccuracy lies in the region of 10 per cent, while I think that

<sup>&</sup>lt;sup>1</sup> C. D. Hodgman and A. Lange, Handbook of Chemistry and Physics, 12th edn. (Cleveland, 1929), p. 735.

we can assume the inaccuracy to be even higher in some instances. Also to be noted is the fact that the inaccuracy in my own procedure is very small, as can be shown in the instances where I carried out two separate weighings, which I did when it was discovered that the observed s.g. was lower than that of copper. In most of these cases this inaccuracy of method became apparent only in the second decimal place, and thus one may assume that the larger inaccuracies are not due to the particular method employed. Indeed, in each individual case they prove to be almost a constant.

In conclusion I would like to point out that I do not consider the specific gravity procedure efficient enough to obtain accurate results upon which to base the degree of debasement of a particular coin, and therefore its place in a chronological sequence. It can be used, however, as a rough tool to find very approximately the percentage constituents in binary coin alloys, or to determine the kind of metal from which a particular coin has been fashioned. In this way it can be of some value to the numismatist especially when used in conjunction with wet analysis. Slightly better results could also be obtained by filing off a thin layer of the surface of the coin and then finding the s.g. of the blank obtained, but of course this procedure is of hardly any use as the coin will then have lost its value to the collector. Mr. Dolley is, however, satisfied that if an average reading is obtained from about twenty coins known to essay a single standard, this will give a guide to the place in a sequence of the whole group of coins, i.e. in practice whether it belongs early, middle, or late in a particular series. Both Mr. Dolley and I were astonished, however, to be told that s.g. determination was recommended quite recently to a student who was working in the later Anglo-Saxon series where fineness may have varied from issue to issue and from mint to mint if not from moneyer to moneyer. Clearly the method would be appropriate only if the researcher was able to compare the figures for twenty or thirty coins of one type, mint, and moneyer against comparable figures from another issue, but in how many cases is this possible?

W. D. H.

# (C) THE EVIDENCE OF THE SPECIFIC GRAVITIES OF THE 'HARPS' AND 'HALF-HARPS' IN THE ULSTER MUSEUM

In the Ulster Museum today there are some 164 'harps' and six 'half-harps'. All but a handful were available for the determination of the specific gravities ('densities') in the Conservation Laboratory of the Department of Archaeology of the Queen's University of Belfast. The results are set out in Tables I–VI. In order to establish absolute independence of assessment, the assignment of each coin to its grouping under initial mark was undertaken by Mr. W. A. Seaby, F.S.A., who was completely unaware at this stage of the findings of the Conservation Laboratory. The Laboratory, too, had not been told the probable chronological ordering of the coins when determining the specific gravities. In this way it was hoped to attain a maximum of objectivity.

From Table I it appears clearly that all the crown-marked 'harps' with the initials of Henry's queens were struck to one standard. Of fifty-two coins, thirty-eight have a specific gravity in excess of 9.500, while only five have one lower than 9.250. The contrast with the position as regards the trefoil-marked 'harps' will be obvious from Table II.

Here we have a total of twenty-four coins, of which twelve have a specific gravity in excess of 9.500, and eight have one below 9.250. For the first time, too, there are coins (4) with a specific gravity below that of pure copper. The rose-marked 'harps', on the other hand, though unfortunately few in number can be seen from Table III to evidence some sort of return to a higher standard in that eight coins have a specific gravity in excess of 9.500, while the remaining two coins are both better than 9.2500. With the lis-marked coins the story is very different. To take first the coins with lis on both sides, five better 9.500, two better 9.2500, while one betters 9.000. At first sight the discrepancy may not seem all that marked, but a glance at the percentages in the second column should show how different is the incidence at each point on the scale. If specific gravity means anything, the lis/lis coins were struck to a standard inferior to that which had obtained in rose. Table IV sets out with complete clarity the very different pattern that prevails at the end of the series. The dividing line is between the REX S and REX 37 'harps', on the one hand, and the REX 38 and posthumous coins on the other. As between the two groups, in the first there are three coins with a specific gravity in excess of 9.500, and nine where it falls between 9.500 and 9.000, while only two have a specific gravity lower than that of copper. Patently these pieces were struck to a lower standard than that of the lis/lis issue, but equally it is obvious that the standard was considerably better than that which followed. Here only three coins have a specific gravity in excess of 9.000, only another five should contain any silver at all, while in the case of the remaining twelve coins the specific gravity is below that of pure copper. To remind us of how far we have come, Table V gives the figures for the half-dozen 'half-harps'. A study of Tables I-IV, too, does suggest that 'mules' were struck to the lower of the standards that obtained for each of the marks concerned except in the case of rose, and already it has been suggested that rose occupies an exceptional position. In Table VI the overall position is summarized, and the picture that emerges is tolerably clear. The coins begin at one standard which is lowered and then briefly raised again. The standard is then dropped, first slightly, then rather more, and lastly quite dramatically. In Table VII it appears that this picture is borne out by the other evidence. What also appears from the two tables together is the inadequacy of specific gravity determination as a means of ordering an extended series of silver coins struck at a variety of mints and to an unknown standard or standards. We will suppose that only three random weighings were available for the crown-marked coins, and one does not have to be a statistician to see that these could easily have fallen all in the lower half of the column. Nor is there the least reason to think that the silver content of the two coins with specific gravities of 10·1756 and 9·2646 differs appreciably, and particularly disturbing is the circumstance that the actual fineness of both (10 oz. 2 dwt.) should lie outside the bracket of 3 oz.-10 oz, which might have been inferred from the specific gravities had we been dealing not with relatively small and thin coins more than four hundred years old but with substantial ingots produced under laboratory conditions and not subjected to corrosion and wear.

From Table VII it is clear that in the case of the 'harps' and 'half-harps' of Henry VIII the estimated finenesses arrived at on the basis of averaged specific gravities arrived at under laboratory conditions are consistently on the low side. It does seem, too, that the margin of error is progressive, the discrepancy increasing as the coins become baser, the figure being of the order of 50 per cent at the top of the table, and 400 per cent at the

bottom. It is not surprising that Caley rejected the specific gravity method absolutely in the case of alloys less than six ounces fine, a point on the scale where on our findings the discrepancy between estimate and reality is already of the order of 100 per cent. Again, too, we would stress that our results have been obtained by averaging a number of determinations of coins believed to have been struck in one mint and to one fineness over a comparatively short period. One must confess to being very sceptical as to whether there is any possibility that the detailed results presented here possess any validity for other series. Certainly one would be appalled to find one of our confrères suggesting that the fineness of a particular coin in some other series was of the order of six ounces simply and solely because the specific gravity he had obtained was in the region of 9.25. On the other hand, it would be very interesting if a student could be found with the time and the inclination to carry out a parallel investigation of say two hundred of Henry's English groats. Assuming a substantial measure of agreement between the two sets of findings, though, it would still be necessary to pronounce a caveat where other series are concerned, for the further assumption would be hazardous that supposed other sixteenth-century coinages in silver to have been produced by exactly the same technical processes as the Henrician issues of the mints—the plural is important—set up in the Tower. Still less could one argue back to the coins of earlier centuries, and especially when there is reason to think that most of the discrepant results are to be accounted for by atmospheric occlusion, a factor particularly subject to fluctuation when flans are produced by hammering rather than rolling, and coins struck by hand and not in the press.

It only remains for us to express our obligations to a number of friends and colleagues who have made possible the writing of this provisional review of the first of the Anglo-Irish coinages to be struck outside Ireland. They include Dr. J. H. Watson, C.B.E., M.C., formerly Chemist and Assayer of London's Royal Mint, Mr. Stephen Rees-Jones, the head of the Conservation Laboratory in the Department of Archaeology of the Queen's University of Belfast, Mr. J. R. Pilcher and the staff of the same Department's Palaeoecology Laboratory who allowed the use of certain of their equipment, Mr. E. Donaldson of the same University's Chemistry Department's Analytical Services Laboratory who furnished us with the spectrophotographical analyses published in the footnote on p. 89 supra, and last but not least Mr. W. A. Seaby, F.S.A., the Director of the Ulster Museum, who made available the unparalleled run of 'harps' and 'halfharps' in that collection and then went on to add to his many kindnesses by classifying them for us according to Carlyon-Britton. In the same institution the Keeper of Archaeology, Mr. L. N. W. Flanagan, F.S.A., and his Assistant, Mr. R. B. Warner, have been more than helpful in the matter of the map for which they were kind enough to make themselves entirely responsible. Such co-operation serves only to underline the uniquely favoured position of the Ulster Museum and of the Queen's University in the close ties already established between two institutions whose buildings are in such fortunate proximity to one another.

> M. D. W. D. H.

	LE	

crown/crow	n						
h T		hI		hB		hR	
10-1681		10.1756		10.1104		9.6132	
6.5.(9.5.×6)	80%	******	80%	10.1093		Towns are	40%
10.0979		10.1141	70	10.0821			30%
10.0640		10.0872		10.0343			20%
9-9757		10.0704			70%	9-1425	
	70%	10.0135		9.9629			10%
9.9040	2.00	10.0000		9.9486			0%
9.8910		9.9484		9.9004			Cu
9.8832			70%		60%	8.4102†	
9-8692		9-9514		9.6727	99.70		
9.8663		9.9353			50%		
9.8532		9.9290		9.5583			
9.8362		9.8925			40%		
	60%	9.8541		9.4137	10.70		
9.7754	70		60%	9-3591			
9.7237		9-7387	33.20	1580000	30%		
9.7051		211230	50%	9.2327	2.4.70		
,,,,,,	50%	9.5465	20/0		20%		
9.4790	70	9.5273			10%		
	40%		40%	9.0311	10		
9-3701		9.4251		17	0%		
502000	30%	9.4107			5,70		
9.2882	70	2000	30%				
9.2646		9.3083	.0				
SIGT MAIN	20%	9.2215					
	70	9.2007		crown/tref	oil (HR)		
		9-1630			S 157/23		
		SUCCESSION	20%				
				9.8972			
			10%		60%		
			-3.00		50%		
					40%		
trefoil/crow	n(H K)			9-3706			
	(59%)			trefoil/cros	vn(HR)	Y	
				trefoil tref		See Table	II
				crown	na Promi	1	
		0 0 V	9.39	-			
		T A result	below the	s.g. of pure	copper.		

# TABLE II

trefoil tre	efoil (h R)	trefoil cr	own (h R
crown			
		9.9234	
9.8876	(66%)	9.8740	
			60%
trefoil tre	foil		
9.9837		9.7333	
9.9731		9.6402	
	70%		50%
9.9250		9.5140	
9.8948		9.5008	
9.8789			40%
9.8324			
		rose	
9.8089		trefoil/tre	foil
9.8042		9-7978	
9.7996			60%
	60%		1
9.7701	13 0000000		0%
9.6900			Cu
	50%	8.0922†	
9.5581	Concessor	72030300-11	
9.4934			
	40%	rose	
		trefoil/tre	foil (?)
9.3783		9.9609	(70%)
	30%		00-05000
9.3009		rose	
	20%	trefoil/tre	foil
9.0595	50000 MB	9.9126	84-47023
	10%		
8-9896	3.55	9.8277	
8.9550			60%
8.9329			
	0%		
	Cu		
8.8780†			
8.7274†			
8-4826†			
8-3316†			

# TABLE III

rose rose		lis  lis trefoil tre	
9.8336			
9.8108		9.7071	(55%)
9-7985			
	60%	trefoil lis	
	33		foil
9.7797			<b>8</b> 000
9.7733		9.3504	
9.7573			30%
9.7373		9.3244	- 10
9.6413		30,000.00	20%
Company of the compan	50%	9.1508	20 /0
	40%	3	10%
9.3859	10/0		10/0
, 202,	30%	trefoil lis	
9-2951	30 70	nejonjus	
	20%	9.6528	
	20 /0	7 0520	50%
lis/lis			40%
113/113		9.4299	40 /6
9.8298		9.3419	
9.8116		9 3419	30%
9 0110	60%	9.2144	30 /0
		9.2144	200/
0.7217	50%	0.1404	20%
9.6317		9-1494	100/
9.5787			10%
9.5739	40.07		
0.4000	40%		
9.4283			
9-3227			
	30%		
Salaria Salaria	20%		
9-1411			
	10%		

# TABLE IV

lis/REX S		lis/REX 37		lis/REX 38		Posthumo	us
9.5469		9.5944		9.0737		9.1242	
9.5315			40%	9.0471			10%
9.4856		9.4700	WES		10%	8.9808	
	40%	9.3883		8.9941	-007/18/87/		0%
9.3727		9-3282		8.9839			Cu
	30%		30%	8.9519		8.8745†	
	20%		20%	8.9246		8.8703†	
9-1783		9.1412		8.8985†		8:8032†	
9.1078			10%		0%	8-2513†	
9.0685		8.9431			Cu	8·1063†	
	10%		0%	8.8616†		8.0441†	
	0%			8.6594†		8.0345†	
	Cu			8.5811†			
8.8254†				8·5028†			
8.6187†							

† A result below the s.g. of pure copper.

TABLE V

Hal	f-groats	Call	avanus	(auguer)	ì
mai.	-grouns	all	Crown	CIUWII	١.

h 7		hΙ		hB	
10·1248 9·9908		9.7096	(55%)	9-4945	(41%)
	70%				
	60%				
	50%				
9.5549					
	40%				
	30%				
9.2741					
	20%				

TABLE VI

				DOMESTICS OF THE PARTY OF THE P				
	crown	trefoil	rose	lis	REX S	<b>REX 37</b>	REX 38	Posthumous
	xx							
80%								
	XXXXX							
	xxxxx	XX						
	XXXXX							
70%								
0.695)	XXXXX	XX						
	xxxxx	XXX	xxx	XX				
	xxxxx	xx	77657650	1 0.00.0				
60%								
00.76	xx		XX					
	xx	xx	x					
	xx	1000	xx					
50%			74.74					
50 70	xx			x	x			
	xxx	XX		×	Ŷ	x		
	xx	44		x	x x	9.		
40%	200				•			
40 /0	XX							
	X	x	×	· vv		X		
	xx		x	XX	X	x x		
30%	00					^		
30%								
	XX	x	x					
	XXX	350	А					
200/	XX							
20%					44			
					X			
	XX	x		x	x	x	XX	x
					X			
10%								
		x					xx	
	X	x				x	x	X
		X					XX	
0%								
		X					x	XX
	X	xx			xx		xx	xxx
		X					x	XX

# TABLE VII

	Recorded assays	s.g. estimate	Probable standard
crown	10 oz. 3 dwt.	6 oz. 12 dwt.	10 oz. 2 dwt.
trefoil	none	4 oz. 10 dwt.	9 oz. 2 dwt.
rose	10 oz. 2 dwt.?	6 oz. 6 dwt.	10 oz. 2 dwt.
lis	8 oz. 4 dwt.	5 oz. 2 dwt.	8 oz.
REX S	none	3 oz.	6 oz.
REX 37	none	3 oz. 6 dwt.	6 oz.
REX 38	2 oz. 16 dwt.	18 dwt.	3 oz.
posthumous	none	12 dwt.	3 oz.

# APPENDIX

# FINDS FROM IRELAND INCLUDING ONE OR MORE COINS OF HENRY VIII OR OF EDWARD VI IN HENRY'S NAME

	Before	2300	lo-Irish	After	Defaus		glish	After	
	1500	'Harps'	'} Harps'	1546	Before 1485	Henry VII	Henry VIII	1546	Continenta
<ol> <li>Clooncarn, Co. Leitrim, 1951</li> </ol>	3	86	169	**	1	6	4	320	1
2. Derry, City?, 1843	2	4.47	440	- 4.4	2	?	×		••
<ol><li>Westport, Co. Mayo, before 1880</li></ol>	27		25	340	15	8?	1?	***	*30
<ol> <li>Courtown, Co. Wexford, 1865</li> </ol>	384	770	En)	12%	5	51	15	86	4
<ol> <li>Ballyholme, Co. Down, 1922</li> </ol>	32	220	22	(9.9)	17	250	17	14.4	235
<ol><li>Cloonsharragh, Co. Kerry, 1847</li></ol>	50	1225	24	97	4.5	207	35		3.61
<ol> <li>Malin, Co. Donegal, pre-1852</li> </ol>	55		929	5252	2.27	X	X	12(1)	230
<ol> <li>Clogheen, Co. Tipperary, 1847 (see Postscript)</li> </ol>	:5	10	4,	225	1	9	19	12.2	1
<ol><li>Downpatrick, Co. Down, pre-1809</li></ol>	?	155	0.1	5010	**	2	?		\$30
10. Sligo Abbey, 1948	40.00	525	414		X	X	×		100
<ol> <li>Askeaton, Co. Limerick, 1954</li> </ol>	38	8:53	1	325	7	39	39	(5)27	7.50
<ol> <li>Rossinver, Co. Leitrim, 1949</li> </ol>	36	9	1357	35.53	527	ti	Ĩ	(2)5)	550
13. Unknown site, pre-1950		8	1211	(2)2	(12)	4,00	4	2500	522
<ol> <li>Nr. Belfast, Cos. Down or Antrim, 1840</li> </ol>	0.90	X	389	(8)8)	300	0	5,894	205	*35
15. 'Co. Down', pre-1923	10	40	0.60	2829	2.0	46	13	300	1
16. Dublin, before 1832	9.4	4	33439	900	490	3.5	388	1450	* *
<ol> <li>Grey Abbey, Co. Down, pre-1812</li> </ol>	22	3	62%	2	222	9	(2)2	1	
<ol> <li>Ballynahineh, Co. Down, 1818</li> </ol>	555	1		1	921	9	?	?	**
<ol> <li>Ballymahon, Co. Long- ford, 1840</li> </ol>	525	193	@u	x	927	44	922	x	\$40
<ol> <li>Three Rock Mountain, Co. Dublin, 1849</li> </ol>	2(2)	38	3.0	74	9.27	-	3?	18	2021
21. Dublin area, pre-1966	4.60	200	X	X	200			2002	2020
<ol> <li>Colligan, Co. Waterford, 1841</li> </ol>	3+?	3 + ?	122	X	585	310	X	X	2050
23. Limerick, City, 1921	**	1	544	15	2.42	100	2	4	200
<ol> <li>Ballysakeery, Co. Mayo, 1950</li> </ol>	**	13	908	300	02	(6)	1	28	Mr.
25. Galway, City, 1904	920	2	20	**	Y000	04.9	56.4	5	1

## POSTSCRIPT

SINCE the above was submitted, I have been fortunate enough to chance on Lindsay's competent listing of the contents of the Clogheen find in JBAA iii (1848), p. 333. The relevant totals are now entered above (no. 8), and hence the hoard's appearance out of strict series. The terminus post quem for the English portion of the find is 1532 (an arrow-marked groat of Henry VIII supported by two half-groats with the initials of Archbishop Lee), but also present are three Anglo-Irish 'harps' with initials  $h \, T$ , and seven with initials  $h \, T$ . Conspicuously absent from the find which is seen now to have been concealed c. 1537 are the 'harps' with initials  $h \, T$ . In other words, well-nigh decisive hoard-evidence in support of the attribution of these last to Katherine Howard was already in print a century and more before Carlyon-Britton arrived at this conclusion on the basis of the epigraphy.

M. D.

## SECOND POSTSCRIPT

SINCE the above was set up by the printer, additional hoard-evidence has come to light and may be summarized here.

Due to be published in the July/August number of the 1970 Spink's *Numismatic Circular* is a small but critical find of three *Dominus* harps from Rossnowlagh, Co. Donegal. In each case the letters flanking the harp of the reverse type are h R, though on at least one coin the R is put in over a R. The initial marks are crown/crown, leaf/leaf over crown, and leaf/leaf. It may be presumed, therefore, that the coins were lost in the winter of 1540/1 or only very slightly later.

Through the kindness of Fr. G. Rice of Navan, Co. Meath, I am able to give details in advance of publication of a parcel of coins in a private cabinet which there is reason to think represent a small hoard from a souterrain at Ballinlough near Crossakeel in the same county. Thirteen coins are concerned. Of these four are *Dominus* harps, all with h R flanking the reverse type, and six are *Rex* harps, two of them with the regnal year 38, and four posthumous. The marks of the *Dominus* coins are crown/leaf and leaf/leaf (3), one of the last being countermarked with a cross pommée within a quatrefoil. The remaining three coins are sixpences Irish of Edward VI in Henry's name, and Pirry's mark on one of them means that the find should probably be dated to the early 1550s.

Through the kindness of Capt. John Harvey of Malin Hall, Co. Donegal, and of his son Mr. Ian Harvey, it has been possible to inspect the pot that contained the 1849 Malin hoard, and to examine the solitary coin surviving from the find. There can be little doubt that the hoard in fact conformed to the model of those from Bangor and Cloonsharragh, and was composed entirely of English coins. The survivor is a Henry VIII 'Wolsey' coinage groat with i.m. lis, and concealment of the find in the early 1530s seems virtually certain. It is proposed shortly to publish the pot together with a note of the exact findspot which lies within the Malin Hall demesne.

M.D.

# THE CLONCREEN BOG (CLONBULLOGE) FIND OF ELIZABETHAN COINS FROM THE CO. OFFALY

# MICHAEL DOLLEY AND A. GUNSTONE

In early September 1968 a find of some sixty silver coins was made on the western side of Cloncreen Bog at a spot a few hundred yards in from the Clonbulloge-Rathvilla road at a point just over two and a half miles north-west of Clonbulloge Church and just before one comes to Esker Bridge. Clonbulloge is a small village some five and a half miles south of Edenderry, while the find-spot of the hoard is almost exactly that distance south-east by east of Daingean, formerly Philipstown and the intended 'county town' of the Marian shiring and plantation of Offaly, the old King's County. The coins were apparently without container, and came to light in the course of Bord na Mona's winning of the turf (anglice peat) which is on a very extensive scale. Many of the coins appear to have been dispersed without record, but one parcel was shown at the Birmingham City Museum in England, where the possessor was persuaded to induce the owner to report his find to the National Museum of Ireland. As a result, twenty-seven of the twenty-nine coins here listed have been acquired by the National Museum, and are published here by kind permission of the Keeper of the Art and Industrial Division. Mr. John Teahan, M.A. The photographs are by courtesy of Mr. W. A. Seaby and of the Director of the Birmingham City Museum and Art Gallery. The latter were taken by Mr. W. E. Belsher. One amusing misunderstanding, and that not serious, was when an unattuned English ear transcribed an Irish speaker's stuttering 'Bord na Mona' (The Bog Authority) as the name of a firm of 'Boden & Warner'! Unfortunately it has not proved possible to trace the remaining thirty or so coins, but there is no reason at all to think that the twenty-nine coins here listed are other than a representative crosssection of the whole hoard.

The references N. and S. in the listing below are to J. J. North, *English Hammered Coinage*, ii (London, 1960) and to P. Seaby (ed.), *Standard Catalogue of British Coins*, 7th edn. (London, 1968), while the division of Elizabeth's coinages is that proposed in I. D. Brown's definitive review 'Some Notes on the Coinage of Elizabeth with Special Reference to her Hammered Silver' (*BNJ* xxvIII. iii (1957), pp. 568–603). In view of the unusual nature of the hoard and the crucial relevance of the condition of the coins to the problem of its date of concealment, all twenty-nine of the coins are illustrated by direct photographs on the accompanying plates (Pl. IV–V). None of the coins is Anglo-Irish, and not altogether surprisingly when the hoard is viewed against the pattern of other Elizabethan finds from the last decade of the sixteenth century. It is doubtful if any of the 'white money', coin no more than three or four ounces fine, had been issued after 1560 and before 1600, while the so-called 'fine' coinage of 1561—the vaunted coins in fact are no more than eight ounces fine—is only very occasionally on record as occurring in hoards. The list of the surrendered portion of the hoard from Cloncreen Bog is, then, as follows:

<sup>&</sup>lt;sup>1</sup> Cf. M. Dolley, 'The Pattern of Elizabethan Coin-Hoards from Ireland', *Ulster Journal of Archaeology* xxxiii (1970) (in the press).

## **ENGLAND**

	PHILIP AND MARY		
1.	Shilling: 1554, full titles and XII: N. 1967, S. 1893.	80·1 grains	(Pl. IV. 1)
	ELIZABETH		
	Shillings		
	Second Coinage: N. 1987, S. 1927		
2.	i.m. cross-crosslet, and fra HI and MEV	93.7 grains	(Pl. IV. 2)
3.	martlet, AN FR HI and MEV	91.8	(Pl. IV. 3)
	Sixth Coinage: N. 2014, S. 1928		
4.	i.m. bell	92.8 grains	(Pl. IV. 4)
5. 6.	⊼ crescent	93.4	(Pl. IV. 5)
0.	crescent/scallop	93.9	(Pl. IV. 6)
7.	hand	96.5	(Pl. IV. 7)
8.	key	92.4	(Pl. IV. 8)
	Sixpences		
	Third Coinage: N. 1997, S. 1929		
9.	i.m. broad arrow head: 1565, ANG FRA HI	47.6 grains	(Pl. IV. 9)
10. 11, 12.	" " " 1565, ANG FR НІВ portcullis: 1566	46·3 45·5, 42·7	(Pl. IV. 10) (Pl. IV. 11, 12)
13.	crown: 1568	47.6	(Pl. V. 1)
14, 15.	,, 1569	45.0, 43.6	(Pl. V. 2, 3)
16–18.	castle: 1571	45.7, 45.0,	(Pl. V. 4-6)
	Fourth Coingge, N. 1007 S. 1020	41.8	
19.	Fourth Coinage: N. 1997, S. 1929 i.m. ermine: 1572	48.8 grains	(Pl. V. 7)
20.	acorn: 1574	43·0	(Pl. V. 8)
20.	Fifth Coinage: N. 1997, S. 1929		(-1)
21.	<i>i.m.</i> cross (plain): 1578	43.4 grains	(Pl. V. 9)
22.	long cross: 1581	48.2	(Pl. V. 10)
	Sixth Coinage: N. 2015, S. 1932		
23.	i.m. hand: 1590	46.8 grains	(Pl. V. 11)
24.	tun: 1593	48.5	(Pl. V. 12)
25.	woolpack: 15–5	50.7	(Pl. V. 13)
26.	key: 1596	46.6	(Pl. V. 14)
27.	Threepence		
21.	Fourth Coinage: N. 1998, S. 1936 i.m. ermine: 1572	21.4 grains	(Pl. V. 15)
	im cimic 1572	21 1 8141110	(111 11 10)
	SPAIN		
	'FERDINAND AND ISABELLA'		
	Pieces of Two Reales	in a second	
28.	Mint of Granada: assayer 'R'	43.3 grains	(Pl. V. 16)

28.	Mint of Granada: assayer 'R'	43·3 grains	(Pl. V. 16)
29.	Mint of Seville: uncertain assayer	51.4	(Pl. V. 17)

Spanish students may like to have the metric equivalents of the weights of the last two coins, 2.81 g. and 3.33 g. respectively. The two coins not acquired by the National Museum of Ireland are Nos. 5 and 15.

Discussion of the new hoard must centre on two features, the probable date and occasion of its concealment and its inclusion of Spanish coins of this particular denomination. The latest of the coins surrendered are the key-marked shilling and sixpence, the latter dated 1596, both of which must have been struck at the Tower Mint between

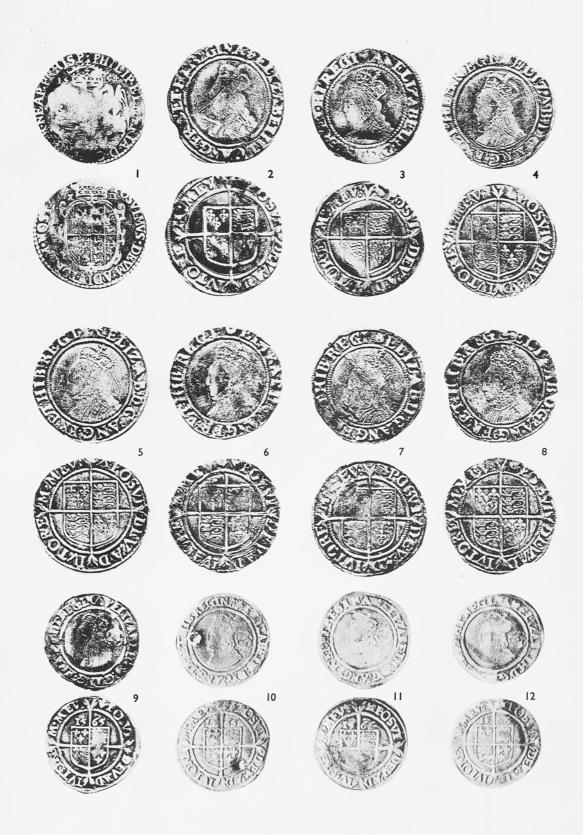
February 1596 and an uncertain date very early in 1598. Both are fresh, and loss as early as the summer of 1597 would not appear inconsistent with their condition. It cannot well be coincidence that in the July of that year and at a point only a dozen miles to the north-west, at Tyrellspass in the same county, an English army was ambushed and cut to pieces among the bogs by the Irish under the command of Piers Lacy, one of the ablest of the lieutenants of Hugh O'Neill, and Richard Tyrell. This rout of Christopher Barnewall by the Old English was only one of three reverses which the English suffered that summer in attempting to execute a three-pronged attack upon Ulster, O'Neill himself pinning down the ailing Burgh near Blackwatertown while Hugh O'Donnell trounced Clifford before Ballyshannon, but in many ways it was the most spectacular as well as chronologically the first of the Irish victories. How precisely the coins came to Cloncreen Bog, though, must be a matter of speculation. Were they concealed by one of the English fugitives to cheat his pursuers, or were they part of the loot stripped from an English corpse and later concealed by an Irishman who feared to be identified by them as a participant in the action and its aftermath? Clearly we will never know, but the association of the hoard with the battle may seem to be something more than a possibility.

The two Spanish coins bear the names of the 'Catholic Sovereigns', i.e. Ferdinand and Isabella who died in 1504 and 1516 respectively. We are most courteously informed by the well-known Spanish professional numismatists X. and F. Calico of Barcelona that by Spanish students the pieces are deemed posthumous, an acceptable date for them being somewhere around 1520. Even so, they are by far the oldest coins in the hoard, and it is worth considering at this point a neglected passage in the second volume of R. Sainthill's Olla Podrida (London, 1853). On p. 301 there is described a hoard from between Mallow and 'Charleville' (i.e. Rath Luirc) in the Co. Cork which is alleged to have contained about forty-five ounces of silver coins. The latest pieces were bellmarked shillings of James I of England, and Sainthill postulated concealment c. 1610. Some eight or nine ounces in the hoard were made up of 'coins of Ferdinand and Isabella of Spain, of two sizes, weighing respectively about 46 grains and 23 grains, and a few billon coins of Henry the Fourth of France, dated 1593'. This would suggest a total of Spanish coins of the order of a hundred at least, beside which the two pieces from Cloncreen Bog may seem very small beer. On p. 302, however, the Cork antiquary goes on to remark that: 'The immense quantity of silver coins of Ferdinand and Isabella met with in Ireland has been a wonder to me from my first boy-collecting days, more especially as there is then a gap down to Philip the Fourth, and his are usually the Low Country dollars, about 1654.' He continues: 'I never but once stumbled on a lot in which were the half and quarter pieces of eight of Ferdinand and Isabella, the same of "Carolus et Johanna Reges" (Charles the Fifth and his mother); and the piece of eight, its half, quarter, and eight [sic] of Philip the Second.' One of Sainthill's suggestions may be safely rejected, the theory that the two reales and real pieces of Ferdinand and Isabella represent a part of Katherine of Aragon's dowry on the occasion of her marriage to Arthur, the elder brother of Henry VIII. On the other hand, he is very near the truth with his observation that in Irish finds there is a gap between such coins and those of Philip IV (1621-65). Treasure recently recovered from the Armada galleons excepted,

<sup>&</sup>lt;sup>1</sup> The find-spot was in fact near Doneraile and wide of Buttevant; cf. NC 1854, p. 96 where the weight of the whole hoard is given as 42 ounces instead of 45.

it is perfectly true that Spanish coins of Charles V and of Philip II are rarely found in Irish hoards, and in those which may be presumed to have been concealed during the reign of Elizabeth they are quite exceptional. One of the present writers (M. D.), too, has notes on a total of approximately seventy Irish coin-hoards believed to have been concealed between the accession of Henry VIII and the death of Elizabeth. Only in the case of the odd find, for example the scantily recorded 1922 hoard from Tullamore and the still unpublished 1943 hoard from Knockaboul in the Co. Limerick, is there the hint of a Spanish coin, and the new find from Cloncreen Bog would seem to be the earliest context in which the piece of two reales of Ferdinand and Isabella has been recorded. In other words, this particular denomination would seem to have come into Ireland with the Armada, and one may legitimately speculate on the reasons why this obsolescent if not obsolete coin from the first quarter of the century should have entered on a new lease of life.

To Mrs. Ann Round, M.A., B.LITT., we owe the valuable observation that towards the end of the century the Spanish military paymasters were scraping the barrel where their reserve of acceptable specie was concerned, and Sainthill's perception was characteristically acute when he remarked that there was a rough equivalence with English denominations, though we would substitute the sixpence and threepence of Elizabeth for his groat and half-groat of Henry VII. What is now needed is a full-scale examination of the incidence of pieces of two reales and one real in Irish finds. On the one hand there is the assertion of Richard Sainthill, a very respectable authority, that such coins were a feature of early nineteenth-century discoveries, and on the other the apparent absence of them from such finds as have been recorded in any detail. There is the odd specimen in Irish cabinets, for example in that of the Royal Irish Academy now housed in the National Museum of Ireland and in the old collections incorporated into that of the Ulster Museum, but one is left with the impression that Sainthill may have been exceptionally fortunate in the part of the country, Cork and its hinterland, where he passed his boyhood. It could well be that the piece of two reales enjoyed in those parts a much wider currency on account of Aguila's belated intervention, and in this case its occurrence at Cloncreen Bog would be of heightened interest inasmuch as the find's concealment seems to anticipate Kinsale by several years. One thing does seem certain, though, and that is that there was very little pre-Armada import of Spanish coin into Ireland, the Knockaboul hoard being quite exceptional with the presence here of the piece of eight reales of Philip II perhaps unprecedented.



DOLLEY & GUNSTONE: CLONCREEN BOG FIND (I)



# THE SCOTTISH SILVER COINAGE OF CHARLES II

## J. K. R. MURRAY

#### SOURCES

In addition to the published information about the Scottish mint and coinage during Charles's reign, of which the principal source is R. W. Cochran-Patrick's Records of the Coinage of Scotland, there is a large body of unpublished material. The two main collections of unpublished papers concerning the mint that are known to me are in the Scottish Record Office, Edinburgh (cited as S.R.O.), and at Thirlestane Castle, Lauder (cited as Lauderdale manuscripts). These unpublished manuscripts contain much detailed information about the day-to-day working of the mint, and include accounts, details of coins struck, and numerous papers concerning the events that led to the closure of the mint in 1682. It has been possible to make only very limited use of all this material within the scope of this paper.

# THE MINT BUILDINGS AND EQUIPMENT

At this period the mint was situated in Edinburgh on the north side of the Cowgate, occupying the space between Todrick's Wynd on the west and Gray's Close on the east, a distance of 116 feet. The mint appears to have been closed from 1650 until the Restoration, when it was found that some of the tools, instruments, and other goods belonging to it had been 'violently taken away'. The mintmaster, Sir John Falconer, was empowered to recover these as best he could. An account dated 1662 describes the mint as consisting of lodgings, a 'great hall', and the following 'work houses':

- 1. The copper compting hous.
- 2. The gold melting hous.
- 3. The silver melting hous.
- 4. The compting hous.
- 5. The neling hous.
- 6. A roume vithin it.

- 7. The old printing hous.
- 8. The hors milne contening tuo roumes.
- 9. The justing hous.
- 10. The printing hous.
- 11. The great forge.
- 12. The litell forge.

The coining presses used for the first coinage of 1664–75 seem to have been the same as those used by Briot and Falconer from 1637 onwards. During 1674–5 the mint was thoroughly modernized, both as regards buildings and equipment, and a large amount of new machinery and implements were obtained from the Tower mint at a total cost of £527. 18s. 11d. sterling. The equipment supplied included:

A coining press for 4-merk pieces, with a cutter, a justing mill with new steel rollers, and a flattening tool—£140.

I

- <sup>1</sup> The site, or part of it, is now occupied by a school and there is no trace of the mint buildings. Todrick's Wynd no longer exists, as it has been incorporated into Blackfriars Street.
- <sup>2</sup> S.R.O. E 105/39.
- 3 Lauderdale manuscripts.
- 4 S.R.O. E 101/9.

C 7473

A complete timber mill—£37. 17s.

A coining press for 2-merk pieces, costing in part £41, 12s.

A coining press for merk and half-merk pieces—£44.

Puncheons, matrices, and dies for silver and gold coins made by John, Joseph, and Philip Roettiers—£150.

When Charles Maitland, general of the Scottish mint, made a survey of the mint buildings in July 1676 after the installation of the new machinery, they consisted of the following:

'The Compting hous', containing two 'great balks with scales', three smaller ones, three balances for weighing gold, and numerous weights, including Scots, English, and 'havour de poise'.

'The printing house', containing 'one press and sweigh' for coining 4-merk pieces, a smaller press for coining two-merk pieces, and a third press for coining merks and half-merks.

'The melting house', containing eight double moulds on frames, and patterns for each species of silver coin.

'The new millne', containing 'ane compleit irone millne with fyve pair of rollers', a timber mill, cutters, 'ane compleit flattning toole with stock and crosses', and sundry other equipment.

'The neilling & storehouses', containing 'one compleit board bench' and a 'great balk' with six hundredweight of iron weights.

'The forges', containing two anvils, bellows and 'one large turning loome for turneing the rollers'.

'The gravers roume', containing puncheons and matrices for gold and silver coins, and 18 pairs of new 'printing irons' (dies).

The survey concludes with the words:

It is also to be observed that at the tyme of this survey the particular buildings and office houses eftir mentioned are new built and in repair viz: vpon the East quarter of the Precinct of his majesties mint Ther is ane new millne house and justing roume consisting of thrie stories. Also next a new house joyneing therto containing tuo forges, Gravers and smyths roumes, also upon the north quarter thereof ane large new building consisting of 3 stories and garrat In which are the Printing, melting and Compting houses and the masters lodgeing All which togither with the neilling house are in good condition and neids no repair.<sup>2</sup>

## THE COINAGES

On 12 June 1661 an Act of the Scottish Parliament ordered a silver coinage of five denominations, namely, four-merk, two-merk, merk, half-merk, and forty-penny pieces. It was remitted to the Scottish Privy Council to consider and order the precise designs.<sup>3</sup> No gold coins are mentioned in the Act, although a gold coinage was contemplated; that none were struck during the reign was probably due to an extreme shortage of bullion.

In November 1662 a warrant was given to Thomas Simon to make puncheons for the five silver coins, and for twenty-merk, ten-merk, five-merk, and  $2\frac{1}{2}$ -merk pieces in

¹ Charles Maitland of Halton was the brother of the Earl (later Duke) of Lauderdale, the Scottish secretary.

<sup>&</sup>lt;sup>2</sup> S.R.O. E 105/46.

<sup>&</sup>lt;sup>3</sup> R. W. Cochran-Patrick, Records of the Coinage of Scotland, ii. 139-40, cited as C-P.

gold.¹ Owing to a transcribing error in Vertue,² Burns was misled into thinking that only one gold coin—the twenty-merk piece—was mentioned in the warrant. Allen has shown, however, that puncheons for four gold coins were ordered. The warrant is embellished with drawings of the four-merk and twenty-merk pieces. Those for the four-merks show a design that is slightly different from the coin as actually struck. On the observe there is a 6-pointed star above the king's head instead of the leaved thistle found on the early varieties dated 1664, and on the reverse the legend SCO ANG FR ET HIB REX appears in place of MAG BRI FRA ET HIB REX which became the normal reverse legend on all values. There are also a number of minor variations in the detail of the design that need not concern us here.

Simon made 160 puncheons for the silver coins, of which there were 'saiven hard punsions, saiven for graving of plate, and the rest small punsions for giving impressions'. For these Charles Maitland, general of the mint, receipted the warrant on 20 January 1663, stating that he had not received anything relating to 'the severall speties of gold'. Simon's account for making these puncheons came to £100.3

By some chance, Simon's account, as reproduced by Vertue, does not give a full list of the coins for which he made the puncheons and, as in the case of the warrant, it is apparent that a small portion of the text has been accidentally omitted. The account begins with the words 'For the originall stamps for eight severall sorts of coynes for gold and silver moneys' and then lists two gold coins (the twenty-merk and ten-merk pieces) and four silver ones (two-merk, merk, half-merk, and forty-penny pieces). In the British Museum there is a manuscript volume, written in the 1660s, which contains abstracts of Simon's accounts for making seals, medals, and puncheons, including the puncheons for the Scottish coinage. The abstract does not mention any puncheons for Scottish gold coins and omits the four-merk piece.<sup>4</sup>

Of the puncheons he made for the Scottish coinage, Simon says that they are 'all in a new manner and form, to coyn by way of the mill, or press'. He describes the designs of the coins in the following terms:

On the silver, on one side his Majesties effigies in an Imperiall manner, head and shoulder in arms, with a scarfe, and a laurell on his head, and the order of St. George, with his Majesties titles; and on the other side, four escutchions concentring in the form of a cross, and between every arms cyphers, being two CC's crowned, and the titles round it; and on the gold his Majesties effigies, in an Imperiall manner, with a laurell about his head, and a scarf about his neck, and his Majesties titles round it, and on the other side, the four arms and cyphers, with the difference from the silver, that the arms are all crowned, and the cyphers not.

In July 1663 an Act of the Scottish Privy Council gave warrant to the general of the mint to deliver to the graver the puncheons for the five silver coins,<sup>5</sup> and another Act of 20 October ordered the coining of two-merk, merk, and half-merk pieces, together with instructions to the graver, Joachim Harder, to make the dies.<sup>5</sup> On 24 March 1664 a further Act ordered four-merk pieces.<sup>6</sup> The four-merk piece was to weigh 21 deniers, 3 grains, and 14 primes, equivalent to 415·18 grains troy weight, with the other

Derek Allen, 'Warrants and Sketches of Thomas Simon', BNJ xxiii (1940-1), pp. 443-4. The original warrants and sketches described here cannot now be traced.

<sup>2</sup> George Vertue, Medals, Coins, Great Seals, and

Other Works of Thomas Simon, second edition, London, 1780, pp. 71\*-72\*.

<sup>1</sup> Department of Manuscripts, Add. MS. 18762.

fol. 10.

<sup>6</sup> C-P ii. 149. 6 Ibid., p. 153.

denominations in proportion.<sup>1</sup> The fineness was to be 11 deniers. There is no mention in the last two Acts of the forty-penny piece and for the time being none were struck. No provision was made for grained or lettered edges, like those used on the English coinage of 1662, and these were not introduced at the Scottish mint until 1687, in James VII's reign. Simon's puncheons for this coinage needed some replacement, for in 1674 Joachim Harder himself made two new puncheons with the king's effigies; the denominations are not specified.<sup>2</sup>

On 16 January 1675, in a letter to the Privy Council, the king gave instructions that the reverse side of the silver coins be changed,3 and in a warrant of the same date ordered the striking of silver coins of the same five denominations as those originally specified in 1661. An Act of Privy Council of 25 February 1675 ordered the new coinage and described the new reverses in detail.4 The weights and fineness were to be as before. The new denomination, the forty-penny piece, was to be coined by the pound weight, each pound containing 292 forty-penny pieces, with a remedy of six coins under or above. Although the king's letter and warrant refer specifically to a change of reverse only, the coins show us that a completely new obverse was also decided on, with the king's head now facing left, that is, the opposite way to which it faces on English coins of this reign. This change of direction can only have been intended to make Scottish coins more readily distinguishable from English ones, and this practice was continued until the end of William's reign. It was important that coins of the two countries should not be confused. The four-merk piece, for example, though much the same size as the crown, was lighter (415.18 gr. as against 464.5 for the crown) and was worth less (4s. 5d.). On the new reverses SCO ANG FR5 now replaces MAG BRI FRA, the mark of value is omitted, and the arms are differently arranged.

Some six months before the issue of the above-quoted warrant, the king had given instructions to John, Joseph, and Philip Roettiers to make dies, puncheons, and matrices for the new coinage. Originally it had been intended to have five gold denominations as well as the silver, that is, coins worth 100, 50, 20, 10, and 5 merks.<sup>6</sup> A drawing preserved at Thirlestane Castle shows the suggested design for the reverse of the two larger denominations. This comprises the royal arms with the Scottish lion in the first and fourth quarters surrounded by the collar of the order of the thistle and a garter with HONI SOIT, etc.; each side are supporters, unicorn dexter and lion sinister; below are a spray of thistle and a rose. The intention to have five gold denominations was abandoned, however, and the Roettiers made tools for the 20-merk and 10-merk pieces only. No gold coins appear actually to have been struck. Since the work the Roettiers undertook for the Scottish mint has not previously been published, it seems worth quoting in full both the royal warrant and the receipt for £150 signed by them for the puncheons and other tools which they supplied, and these are reproduced below.<sup>7</sup> The denominations are given as 20-shillings, 10-shillings, crown, half-crown, shilling, and sixpence, but

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<sup>1</sup> The weights used at the Scottish mint were:
24 seconds = 1 prime
24 pr. = 1 grain
24 gr. = 1 denier
24 den. = 1 ounce or 16 drops
16 oz. = 1 pound
16 lb. = 1 stone

<sup>2</sup> S.R.O. E 101/6.

<sup>3</sup> C-P ii. 165-6.
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Ibid., pp. 166-8.
 FRA on 1/16-dollars.

<sup>6</sup> Lauderdale manuscripts.

<sup>&</sup>lt;sup>7</sup> S.R.O. E 101/9, R. A. Hoblyn in 'Milled Scottish Coins: 1637-1709', NC 1879, pp. 121-2, judged that the second coinage was the work of one of the Roettiers, but he did not have any evidence that this was so.

the correct names should be 20-merks, 10-merks, 4-merks, 2-merks, merk, and  $\frac{1}{2}$ -merk. It appears that the Roettiers did not make a puncheon or matrix for the sixteenth-dollar (forty-penny piece). Other puncheons and matrices required for the silver coins, as well as the dies, were made at the Scottish mint.<sup>1</sup>

Charles R.

Our will and pleasure is That yow forthwith engrave and finish all such Puncheons, Counter Puncheons, Mattrices, and Dyes for our Gold and Siluer Coynes for our Kingdome of Scotland as shall be desired of yow by the Gennerall or the master of our Mint in our sayd Kingdome, And according to such directions as yow shall receaue from Henry Slingsby Esqr master of our mint in the Tower of London. And when yow haue finished the same, yow are to deliuer them unto the Duke of Lauderdale, sole secretary for our sayd Kingdome of Scotland, for the vse of our mint there, or to such persons as our sayd Secretary shall appoint, to receaue them. Uppon delivery of which yow are to be payd, And this shall be a sufficient Warrant vnto yow for so doing. Giuen at Hampton Court this present tenth day of June 1674.

To John, Joseph and Phillip Rottiers chief gravers of our mint in the Tower of London.

London, this 12th Aprill 1675 Receaued of Mr John ffalconar master of His Majestys Mint of The Kingdome of Scotland By the hand of Mr Robert ffalconar of London, Merchant, the somme of one hundred & fifty pounds sterling, in full (and of all other accompts whatsoever) for Puncheons, Counter Puncheons, Mattrices, and dyes, for the Gold and Siluer Coynes, of That Kingdome; Made by us, By His Majestys Speciall Warrant, directed unto us whereof Coppie stands aboue and deliuered accordingly vizt. 2 Puncheons, being a head and reverse for the 20s peece of Gold, with its Mattrice and Small Puncheons thereunto belonging vizt, The Thisle, the rose, the flower de Luce, the Harpe, and the Crowne. Two puncheons, being a head and riverse for the 10s peece of Gold, with its Mattrice, Two payre of dyes and the small puncheons thereunto belonging, vizt. The Thisle, the rose, the flowre de Luce, the Harpe, and the Crowne. One puncheon, being a head for the Crowne peece in Siluer, with its Mattrice thereunto belonging. One Puncheon, being the head for the halfe Crowne peece in Siluer, with its Mattrice thereunto belonging. One Puncheon, being a head for the shilling, with its Mattrice thereunto belonging. And one Puncheon for the Sixpence, being a head with its Mattrice thereunto belonging. We say receaued in full for the above sayd Puncheons, Counter Puncheons, Mattrices and dyes. 150 pounds. By us

(signed) Joannes Roettiers Joeseph Roettiers Philippus Roettiers

A considerable number of matrices, puncheons, and dies are preserved in the National Museum of Antiquities of Scotland, of which sixty-five are recognizable as being for the silver coinage of 1675–82. These implements have been described by Hocking.<sup>2</sup> Of particular interest are the Roettiers' tools for the projected gold coinage, and also a reverse die for a one-eighth dollar of 1675, of which no specimens seem to be known today. Hocking comments on the curious fact that so many dies and puncheons for the short period 1675–82 should have survived, whereas there is a complete absence of their immediate predecessors and successors. This, he thought, may have been due to their being impounded by the commissioners who investigated the affairs of the mint in 1682.

The story of the mint's affairs at this time is a lengthy one, but it may be stated briefly that in August 1682<sup>3</sup> the Scottish mint was closed on account of malversations by four of the mint officials, including the general, Charles Maitland, and the master, Sir John

<sup>1</sup> e.g. S.R.O. E 101/9, 101/10, 101/11.

<sup>&</sup>lt;sup>2</sup> W. J. Hocking, 'Notes on a Collection of Coining Instruments in the National Museum of Antiquities, Edinburgh', *Proceedings of the Society of Antiquaries* of Scotland, 1914–15, pp. 308–32.

<sup>&</sup>lt;sup>3</sup> The 'melting book' for the Scottish mint (S.R.O. E 103/4) shows that the mint continued to function up to 30 Aug. 1682, which is the date of the last entry in the book.

Falconer. During the investigations a large number of malpractices came to light and it was estimated that a sum extending to at least £699,873 Scots (equivalent to £58,322, 15s. sterling) had been embezzled. The mint was not reopened again until 1687.

The correct names of the coins of the second issue are as stated in the official documents. It is uncertain when they began to be termed dollars, half-dollars, and so on. During the seventeenth century vast numbers of foreign thalers circulated in Scotland, so it can hardly be doubted that the largest Scottish silver pieces acquired the appellation. A traveller in Scotland, Thomas Kirke, writing in 1677, tells us that 'their money is commonly dollars, or mark-pieces, coined at Edenbrough . . .'2 and this implies that the word dollar was then current when referring to Scottish coins. Anderson, whose book *Diplomatum et Numismatum Scotiae Thesaurus* was published in 1739, refers to the second issue four-merk pieces in a footnote as 'thaleri Scotici vulgo nominati'.<sup>3</sup>

By an Act of the Scottish Privy Council of 5 March 1681 the value of the four-merk piece was raised from 53s. 4d. to 56s. and the other values proportionally. The Act also raised the price that was to be paid by the mint for silver handed in as bullion.<sup>4</sup> From now on the names of the coins were altered to 56s., 28s., 14s., 7s., and 3s. 6d. pieces. In August 1695, in a petition concerning forty-shilling pieces, the then mintmaster, Sir William Denholme, emphasized a point he was making by stating that 'the value of thretteen shilling four pennies was never put upon the merk peice after they were raised to fourteen shilling neither were they tearmed therafter merk peices but fourteen shilling peices in the Registers'.<sup>5</sup> Not unreasonably, Burns understood this as meaning that the change in value was concurrent with the change of type in 1675,<sup>6</sup> but there are no grounds for believing that this was so. The Act of Privy Council of February 1675 ordering the new issue refers to the coins as four-merk pieces and so on, and the mint registers, discussed below, confirm that no alteration of the values took place until that ordered by the Privy Council in 1681.

# THE MINT REGISTERS

Among the papers preserved in the Scottish Record Office which refer to the Scottish mint are two registers containing an exact account of the silver money coined during the period 1664–81.7 The first of these registers covers the period from 22 July 1664 to 4 December 1673, and the second from 7 April 1674 to 23 December 1681. Both registers appear to be transcripts of rough copies or scroll books, for they contain, here and there, some minor errors. These mistakes are certainly slips of the pen made when copying and are not due to any deliberate act of falsification. Cochran-Patrick has described the first

- <sup>1</sup> At his trial before the Lords of Session, Lord Halton was ordered to pay £70,000 sterling 'for his embezlements of the mint and coynage'. See *The Lauderdale Papers*, iii. 229 (The Camden Society, 1884–5). Sir John Falconer also had to pay some thousands of pounds.
- W. C. Dickinson and G. Donaldson, A Source Book of Scottish History, iii, Edinburgh, 1954, p. 348.
  See p. 105, footnote (b).
- <sup>4</sup> Register of the Privy Council of Scotland, vii, 1681-2, pp. 50-2. R. Ruding, Annals of the Coinage, ii. 18, quotes this Act, but gives the date as 4 Mar.

1680 which is in the Old Style and should be 1681. In Scotland the new year had begun on 1 Jan. since 1600.

- <sup>5</sup> C-P ii. 252. See also I. H. Stewart, *The Scottish Coinage*, second edition, 1967, pp. 112–13 and 206, where this matter is discussed. At the time of publication Mr. Stewart was not aware of the existence of the second of the two mint registers to which reference is made below.
  - <sup>6</sup> E. Burns, The Coinage of Scotland, ii. 501.
  - 7 S.R.O. E 102/11 and 102/12.

of the two registers (the second appears to have been unknown to him), but as the information he gives is not very full, some further details may be of interest.<sup>1</sup>

A typical entry in the first register is that for the journey on 4 March 1669:

Printed in fowr & two merks fowr stone eleven pound In merks fiftein pound weight In halfe merks two pound ffowr ounce two drope In all fyve stone twelue pound fowr ounce two drope fynnes is 11 deniers 2 graine

The Essay in the box

Heavy on this journey 3 : 10 : 0

The second register has been written up in tabular form. It shows not only the weight of metal coined but the actual number of coins struck as well. The quantities of coins are reckoned in casts, a cast being four coins. The following is the entry for 10 April 1674:

Moneth	day	Fyr	nnes	Species	Casts	od	st	pds	ounces	dr
	200000	den	gr					***********		
Aprile	10th	11	00	2M	0193	01	01	04	14	07
				1M	0168	03	02	01	02	00
				₫M	0197	00	00	05	05	09
				#154C			03	11	06	00

In the second register there is no mention of an 'essay' being put in the box, nor is it stated whether the journey was light or heavy.

For a few years after 1664 the number of silver coins struck was small. In 1667, for example, there were only two journeys, in June and August, and in 1668 there were again only two, both in August. The mint was not so inactive as it might appear, however, since there was a vast output of copper turners between 1663 and 1668.<sup>3</sup> There was also a heavy mintage of copper bawbees and turners during 1677–9. The small output in 1674 was probably due to the extensive rebuilding operations in that year which must have interfered with production. During 1675 there were frequent journeys up to 24 June, but then there was a break until 17 November. This break must represent the period when the new machinery from London was being installed, so it may be assumed that the latter date marks the beginning of the second (dollar) coinage.

Table I shows the number of journeys in each year in which each denomination was struck. It will be noted that merk pieces were generally struck in every journey. The mint was often inactive during the winter months: this was probably due to the reluctance of mariners to undertake winter voyages, so that the supply of bullion brought to the mint by the merchants dried up.<sup>4</sup> The same pattern may be seen in earlier Scottish mint registers.

In the second register, up to the end of 1680, the coins were generally referred to as 4M, M, ½M, etc. No coins were struck in January or February 1681, but on 4 March,

number expected, because they were slightly above the standard weight. Hence there was a loss to the mint of £3. 10s. Conversely, when coins were 'light on this journey', there was a gain to the mint.

<sup>&</sup>lt;sup>1</sup> R. W. Cochran-Patrick, 'Note on Some Mint Accounts of the Coinage of Scotland after the Accession of James VI', NC 1879, pp. 66–73. See also the paper by H. A. Parsons, 'Unpublished and Doubted Milled Silver Coins of Scotland', BNJ xix (1927–8), pp. 145 ff.

<sup>&</sup>lt;sup>2</sup> The term 'heavy on this journey' means that the weight of metal coined yielded fewer coins than the

Over 8,000 stone weight of copper appears to have been coined during this period. See S.R.O. E 102/10.
 See S. G. E. Lythe, *The Economy of Scotland*, 1550–1625, p. 134.

the first entry for this year, we find the term '14: sh.' used for the merk piece, showing that the change in value had taken place, although the actual date of the Act is a day later.

TABLE I

The Number of Journeys in Each Year in which Each Denomination was Struck

	10/21/2e 1	72/8/02	na no:	79137641	Dave	Total journeys	ear or as the total
	4M	2M	M	$\frac{1}{2}M$	40d.	in year	Period of operation
1664	13	13	5	2		13	22 July to 31 December
1665	5	5	5	5	• •	5	June, July, August, October
1666	3	5 8	5 8 2 2	5 5 2 2		5 8 2 2	January to December
1667	22122	\$33.5	2	2	36.34	2	June, August
1668	1202	5050	2	2	701	2	August
1669	13	13	32	32		32	January to December
1670	24	25	34	34		34	March to November
1671	1207	1170	53	53	25.5	53	February to December
1672			29	29		29	January to November
1673	18	29	32	32		32	January to December
1674	1	4	4	4		5	4 journeys in April, 1 in December
1675	10	18	31	21		31	January to 24 June, and 2 journeys in November
1676	6	2	39	33	1909	39	March to November
1677	9.9	1000	24	19	11	24	February to October
1678	2	•3•1	9	8	3	9	February, April, August
1679	4	±0.≠0	18	14	1	18	March to July
1680	3		23	10	2	23	March to December
1681	10	6	41	14	4	41	March to December

Although the first register does not give the numbers of coins struck, the approximate number may be calculated from the weights. In Table II these numbers are shown in brackets below the weights, the figures having been reached after dividing the totals by the standard weights in drops of the respective denominations, as follows:

	Standard weight	Equivalent in drops	Equivalent troy weight
4-merks	21 den, 3 gr. 14 primes	14-1	415·18 gr.
2-merks	10 den. 13 gr. 19 primes	7.05	207.59 gr.
merk	5 den. 6 gr. 21 pr. 12 sec.	3.52	103-79 gr.
½-merk	2 den. 15 gr. 10 pr. 18 sec.	1.76	51.89 gr.
40 <i>d</i>	292 to the pound weight	0.88	25.82 gr.

The quantities thus obtained are generally a slight underestimate, because the coins were frequently underweight. An examination of the register for 1664-73 shows that from 1667 onwards the term 'light on this journey' occurs with much greater frequency than its converse. In the second register, where both weights and numbers of coins struck are recorded, it has been found that, where tested, the coins were always slightly light. Only forty-penny pieces approximate to their correct weights. One of the Lauderdale manuscripts contains a statement showing that between April 1674 and November 1676 the coins minted were light by nearly  $10\frac{1}{2}$  stone, giving a gain to the mint of £8,168. 11s. Scots. Another Lauderdale manuscript shows that for the year 1677 every one of the twenty-four journeys was 'light'. This tendency to lightness is very marked in the weights

of merk pieces given in Richardson's catalogue. The twenty-three merks (Nos. 7–29) have an average weight of only 94.04 gr. against the standard weight of 103.79 gr., the lightest coin weighing as little as 87 gr. and the heaviest 100 gr.

TABLE II
Numbers of Coins Struck

		4-m	erks			2-11	nerks			Me	rk				-merl		40-penny	T	otal	weigh	tt.
			SI.	. lb.	oz.	dr.			51.	lb.	oz.	dr.	51.	lb.	oz.	dr,	piece	st.	lb.	oz.	dr.
1664			52	13	9	5			1	12	14	6		5 (7	68)	8	44	54	15	12	3
1665			18	12	3	15			1	13 (2,1	2	4		9	9 394)	7		21	2	15	10
1666			14	6	12	3			7		11	4		14	11	6	2.5	23	4	2	13
1667		3							6	10 (7,7	10	0		12	9 829)	4	344	7	7	3	4
1668							**		11	(12,9	8	0		14	5 (090)	15	900	11	15	13	15
1669			61	3	0	0			140		11	9	9	14	,031)	8	••	211	11	1	1
	51.	16.	oz.	dr.	st	lb.	oz.	dr.													
1670	91	6 (26.	11 ,556)	0	37		,791)	1	81	(94,5	3 (56)	0	7		11,432)	9	9.7	218	1	11	10
1671			06						319		15	14	7	13		6	**	327	12	13	4
1672		,					**		182		11	8	5	4	333)	11	2537	187	10	8	3
1673	47	(13	10 ,737)	0	66		10	6	84		6	13	6	6 (14	(915)	12	**	204	0	3	9
1674		- 1	577			4	,170				219				,292		363	15	1	11	9
1675 (merk coinage)		4,0	083			23	,119			87,	947			17	,824		1515	133	6	8	15
1675		3				2	,379			5,	700			Í	,411			9	5	12	10
(dollar coinage)																			17276-7		
1676		2,	368			1	,383			199,					.047		. 33	194	10	4	0
1677										109,					,853		16,577	108	8	12	4
1678			794				15			27,					,789		4,213	30	1	3	2
1779			679							60,					,490		1,469	84	4	12	
1680			357							92,					,647		7,235	91	8	14	10
1681		0,	917			1	,961			148,	748			10	,101		5,465	156		1	1.4

Table III gives the main varieties of each denomination. The number of minor varieties, including variations of stops, is very large indeed and so as to keep the table down to a manageable size all but a few stop varieties have been omitted. Many varieties of obverse and reverse are of extreme rarity, being the survivors from a particular die. Except for No. 52, the table contains only those varieties actually seen by myself. New varieties still occasionally come to my notice, so no claim is made that the list is exhaustive.

On comparing Tables II and III it will be found that there are some interesting discrepancies. I have not traced any specimens of coins struck in the following years:

Four-merks	1666, 1669.
Two-merks	1665, 1666, 1669.
Merk	1667.
Half-merk	1674.
Dollar	1678.
a-dollar	1675, 1681.2

<sup>&</sup>lt;sup>1</sup> A. B. Richardson, Catalogue of the Scottish Coins in the National Museum of Antiquities, Edinburgh, pp. 305-7.

<sup>&</sup>lt;sup>2</sup> A letter in Spink's *Numismatic Circular* for Dec. 1968 (p. 375) inquiring about the existence of Scottish coins with the above dates yielded no reply.

Anderson's *Diplomatum et Numismatum* gives the merk of 1667 and later writers seem to have copied this and to have added the \( \frac{1}{8}\)-dollar 1681. These coins could well exist, however. Hoblyn gives both of them; but he also lists other coins which he incorrectly states were in the British Museum collection, so he cannot be regarded as an entirely reliable source.\( \frac{1}{2}\)

It has been shown that the numbers of coins minted between 1664 and 1673, as given in Table II, are not completely accurate owing to the coins being normally underweight. A further probable source of error, which applies to dated coins in general, is that they may not necessarily have been struck in the year they are dated. This seems to have been so with Charles II's Scottish issues, even though there are cases where dates have been altered by overstriking. All the mintage figures in Table II, therefore, should be regarded as being no more than approximately correct.

In view of the substantial number of four-merk and two-merk pieces struck in 1669, it is remarkable that none are known of this date. The mint register shows that they were all struck between 19 January and 9 July 1669, so it seems improbable that 1670 dies could have been used.

Only 577 four-merk pieces were struck in 1674, yet there are three reverse die varieties. All were minted in one journey on 24 December. While this is a very rare date for the four-merk piece, the numbers that turn up seem rather more plentiful than one might expect. It is possible, therefore, that a proportion of the 4,083 pieces struck in 1675 had 1674 reverses. Four-merks dated 1675 are exceptionally rare; they were minted regularly from 4 January to 4 March, thereafter none being struck until the new type in March 1676.

The 794 four-merk pieces of 1678 were struck in February and August. Since none are known of this date, it is possible that old dies were used.

As the mint records for 1682 appear to have been lost, there is no means of telling whether half-dollars and  $\frac{1}{16}$ -dollars were struck in that year.<sup>2</sup>

The pellet-in-annulet variety of stops is found only in 1675 and 1676 and was presumably experimental. Of the dollars dated 1676, one variety has pellet-in-annulet stops on both sides (34), while another has these stops on the reverse, but has pellets on the obverse (34a). The peculiarity of these two varieties is that the same die has been used for both obverses. The die may be readily recognized because the s in CAROLVS is double-punched. It might be argued, in the case of 34a, that the stops had become so worn that they simply appear to be pellets, but this feature has been observed on three specimens, one of which is in a very good state of preservation. The most likely explanation seems to be that the original pellet-in-annulet stops proved unsatisfactory and were repunched as pellets at a later stage. The variety with pellets both sides (34b) is from different dies.

The merk dated 1664 with a thistle-head below the bust (12a) likewise could have been experimental, but may be due to a die-sinker's error. The striking from  $\frac{1}{8}$ -dollar dies on a  $\frac{1}{4}$ -dollar flan (43b) seems to be a trial piece.

Die axes. On the merk series the axis is indifferently 0, 90, 180, or 270 degrees. On the dollar series the axis is nearly always 180 degrees.

<sup>&</sup>lt;sup>1</sup> R. A. Hoblyn, 'Milled Scottish Coins: 1637– 1709', NC 1879, pp. 108–37. (28s. piece) in 1682 (vide S.R.O. E 101/11/26), but they may not have been used.

# ACKNOWLEDGEMENTS

I am much indebted to Mr. Ian Stewart for reading through an early draft of this paper and making many suggestions for its improvement; to Mr. R. B. K. Stevenson for lending me photographs of all Charles II silver coins in the National Museum of Antiquities, Edinburgh; to the Dowager Countess of Lauderdale for permission to search through the mint papers at Thirlestane Castle; and to the staff of the historical search room, Scottish Record Office, Edinburgh, for all the assistance I received during numerous visits there.

TABLE III

List of Main Varieties

First	Coinage		
Fou	R-MERK	CS .	
1	1664	Leaved thistle above head	
la	**************************************	Leaved thistle below bust	
2	1665	21/	
3	1670	**	
3	1673	23	4 of value over →
5	1674	F below bust	4 of date over 3
5a	2020 N	**	colon after 4 of value
5b			BR and .4.
6	1675	"	
404C			
	-MERK		
7	1664	Leaved thistle above head	
7a	14 (4)	Leaved thistle below bust	
8	1670	200	
9	1673	2 (2) 20	
9a		F below bust	
10	1674	Leaved thistle below bust	
10a		Small F below bust	
10b		Large F below bust	
11	1675	Small F below bust	W-000-00-00-00-00-00-00-00-00-00-00-00-0
11a			BR for BRI
116		Large F below bust	
MER	K		
12	1664	Leaved thistle below bust	
12a		Thistle-head below bust	
13	1665	Leaved thistle below bust	
14	1666	***	
15	1668	**	
16	1669	**	
16a		22	No points on obverse
16b		**	No points on reverse
16c		**	Scottish arms in 2nd and 4th quarters
17	1670	1250	STANDARD DE LINE AND OLIVE DESCRIPTION OF STANDARD CONTO.
17a		32	No points on obverse
18	1671	12	
18a		12	Value positioned over the English arms
19	1672	31	with white the control of the state of the second of the s
19a		11	2 of date reversed
20	1673	12	
20a	-5,00,517.5	330	No points on obverse
20b		"	BRA for BRI
21	1674	Section 1	

	THE	SCOTTISH SILVER CO	INAGE OF CHARLES II
21a		F below bust	
22	1675	8 90 0 8 05	
22a	40.5	(3 <b>3)</b>	Value inverted
22b		No F or thistle below bust	7 1100 111101
		3 3 5 55200000 500000 3 720	
HAL	F-MERK	c	
23	1664	Leaved thistle below bust	
23a	-0.00m	**	Countermarked 1665 on obverse
24	1665	32	
24a		25	Irish arms in 2nd quarter
25	1666	**	THE CASE OF THE POINT SECURITY SECTION AND SECURITION OF THE PROPERTY OF
26	1667	**	
27	1668	75	
28	1669	**	
28a		**	Scottish arms in 2nd and 4th quarters
29	1670	79%	
29a		**	No points on obverse
30	1671	.78	
30a		**	No points on reverse
31	1672	**	Seed St. 1911
31a		211	No points on reverse
32	1673	. 39	NO. SERVICE PROPERTY CONTRACTOR OF THE PROPERTY OF THE PROPERT
32a		**	No points on reverse
33	1675	F below bust	
33a		No F or thistle below bust	
Secon	nd Coina	age	
Dot	LAR (Fo	our-merks, 1676-80; 56s. piece,	. 1681-2)
34	1676	Pellet-in-annulet stops both	· Control of the cont
34a	1070	: (1) 12 12 12 12 12 12 12 12 12 12 12 12 12	everse; pellet stops on obverse
34b		Pellet stops both sides	everse, pener stops on coverse
35	1679	21	
36	1680	37	
37	1681	**	
38	1682	"	
-m-m-	0/26/0/27	***	
HAL	F-Dolt	AR (Two-merks, 1675-6; 28s.	piece, 1681)
39	1675	Pellet-in-annulet stops	
40	1676	***	
41	1681	Pellet stops	
		Property Version Control of the Cont	entrope a rank as
		OOLLAR (Merk, 1675–80; 14s.	piece, 1681-2)
42	1675	Pellet-in-annulet stops	
42a	2752743	Pellet stops	
43	1676		
43a		E of DEI punched over an R.	
436	VALUE	Struck from 1/8-dollar dies	
44	1677	A 7- 24	10 Contract to # 2
44a		Second 7 of date punched of	over a 6
45	1678		
46	1679		
47	1680	Gunovi e	
47a	1601	CAROVLS	
48	1681		
49	1682	CAROVIE	Spottish arms in 2nd avantar
49a		CAROVLS	Scottish arms in 2nd quarter
Eigr	нтн-До	DLLAR (Half-merk, 1676-80; 7	s. piece. 1682)
50	1676	Manual Ma	31. # 13 to 32 d 2 d 2 d 2 d 2 d 2 d 2 d 2 d 2 d 2
51	1677		
***	-		

```
52
      1678
               The 8 punched over a 7
53
      1679
54
      1680
54a
               French arms in 1st quarter, Irish in 2nd, etc.
55
      1682
               The 2 is formed by a reversed 5
SIXTEENTH-DOLLAR (Forty-penny piece, 1677-80; 3s. 6d. piece, 1681)
56
      1677
57
      1678
               The 8 punched over a 71
      1679
58
               The 9 punched over a 7
59
      1680
60
```

All the above are in the National Museum of Antiquities of Scotland, Edinburgh, except the following:

British Museum, 5.

Fitzwilliam, 20a.

I. H. Stewart's collection, 12a, 31a, 42, 43b, and 47a.

1681

J. K. R. Murray's collection, 16c, 18a, 21, 22b, 34b, and 44a.

Catalogue of Kermack Ford sale, 1884 (lot 930), 52.

#### ADDENDUM

The best account of the malversations at the Scottish mint appears to be in Sir John Lauder of Fountainhall, Historical Notices of Scottish Affairs, i, 1661-83 (Edinburgh, 1848), pp. 355-7, 373, 376, 397-406, and 438-40. Halton's fine was subsequently reduced to £20,000 and Sir John Falconer's to 43 years full rent of his whole estate.

p. 148, where the author claims to have had a specimen <sup>1</sup> See H. A. Parsons, 'Unpublished and Doubted Milled Silver Coins of Scotland', BNJ xix (1927-8), with 1678 as the original date.

# THE DIES OF THOMAS SPENCE (1750-1814)

# R. H. THOMPSON

THIS paper was stimulated by a most interesting handbill reprinted by Dr. Bell (1968, 165). Although it had previously been reprinted by Arthur Waters, his work (1917) was published in only seventy-five copies. Dr. Bell, however, added some comments denying the handbill's authenticity, and it appears never to have been properly appreciated. It seemed more likely that the preconceptions were false which denied the handbill recognition than the handbill itself, and the skeleton of this paper, delivered at the British Numismatic Society's symposium on the eighteenth century held in May 1969, was devoted to proving the handbill's authenticity. However, the arguments developed for this purpose serve also to identify Spence's dies as distinct from others with which they are linked, and it is towards this problem of attribution that the following paper is directed.<sup>2</sup> Miss Marion Archibald and Dr. J. P. C. Kent, of the Department of Coins and Medals at the British Museum, have been willing to discuss points in it at any time, and to them I am deeply grateful. The splendid photographs for the plates I owe to Messrs. John Webb of the Brompton Studio, and Peter Clayton.

After the minimum of detail essential to a chronology and understanding of Spence, I identify as his several dies which name him, dies listed in combination in his Supplement, associated and other dies in the handbill, and dies linked chiefly with these; I consider a couple of dies which occur mainly with edges naming Spence; discuss the remaining linked dies, some of them appearing at first to be possible Spence dies; and deal briefly with the farthing-size dies. Finally, I consider the use Spence made of his tokens, counterstamps, and dies. Within this framework I am able to add something to Waters in description of the dies, which in certain cases might have sufficed to identify them as Spence's. The descriptive notes are never, in the first instance, used for this purpose, nor to make the designs conversation pieces of dubious relevance: they are intended to explain the designs where necessary, and to indicate their relationship to Spence and to their time. I have endeavoured to enter into his mind, to understand and interpret him by his own lights, without (as George Vertue put it) 'any observations concerning right or wrong, just or unjust, leaving that to the impartial readers of the best authentick writers'. Such observations would not be numismatics.

#### SPENCE3

Thomas Spence was a poor schoolmaster of Newcastle upon Tyne. His experiences led him to propose a phonetic alphabet (1775), which he used for several of his numerous

References to the sources at the end are given in the form of surname (or other heading) and date, followed in the case of catalogues by the item number, otherwise by page or folio.

<sup>2</sup> Mr. Tom Hill's analysis, in *Seaby's Coin and Medal Bulletin*, No. 393, Feb. 1951, pp. 59-60, merely includes all the tokens which Dalton and Hamer grouped in Middlesex as Spence's, and excludes all those they

put in other counties.

<sup>3</sup> For Spence see Miss Rudkin (1927), and other works listed among the sources for this paper. For the historical background and an assessment of his real importance see especially Dr. E. P. Thompson (1968), who has magnificently re-created the causes for such anger as Spence's.

tracts. He claimed to have reduced to order, however, not only language but also politics.

In 1771 there was a lawsuit between the freemen of Newcastle and the Corporation, which had attempted to let part of the Town Moor to builders. The freemen won their case that the land belonged to them, and with the rents were able to build and endow several almshouses. This greatly inspired Spence, and on 8 November 1775 at a meeting of the new Philosophical Society he delivered his Plan: men have natural and equal rights to liberty and hence (he argues) to land, of which the landlords must be dispossessed; the inhabitants of every parish should form a corporation, which will let small plots of land to each of them, the rents being used to pay officials and members of parliament (elected by a universal ballot), to finance public services, to maintain the poor, etc. For this lecture, and for immediately publishing it like a halfpenny ballad, the society did him 'the honour' of expelling him.

Spence's fortunes thereafter declined—children are said to have been kept away from his school (Evans, 1821, 2). By 6 December 1792 (in November of that year according to Miss Rudkin, 1927, 58) he had moved to London, where for the next four years he was involved in the intensive democratic agitation stimulated by the French Revolution.

He set up as a radical bookseller at the corner of Chancery Lane. For selling the 'social' Second Part of Paine's *Rights of Man*, and his own publications, he was on three occasions arrested. On Christmas Eve 1792 his landlord gave him three months' notice to quit his stall; his own *Rights of Man* (1793) gives the Chancery Lane address, so it was early in 1793 that he moved to No. 8 Little Turnstile, where this paper is most concerned with him.

Among his continuing flow of pamphlets and broadsides to promote his Plan, he started a penny weekly which in reaction to Burke's insulting reference to the 'swinish multitude' he named *Pigs' Meat*. When he had completed the second volume, however, Pitt's Government suspended the Habeas Corpus Act, and on 20 May 1794 Spence was arrested and committed to Newgate with other members of the reforming societies. The trial for high treason of Thomas Hardy, secretary of the London Corresponding Society, resulted in his acquittal amid popular rejoicing, to be followed by that of Horne Tooke and of John Thelwall. Spence was finally released, without trial, on 22 December; his business was 'much decayed'.

He added to his bookselling the sale of tokens: the 'many coins, which might have been had in currency a few months back, at the value of a halfpenny, [and] now on account of their scarceness bring a great price' (Spence, 1795A, p. 52). The first documentary evidence for this activity is the payment Miss Banks made on 17 March 1795 (MS.) for 'Pitt & Fox' (cf. obv. L), and to a Mr. Brady for 'Spence'. He soon published one of the earliest catalogues of the eighteenth-century tokens, *The Coin Collector's Companion* (1795), which 'had three advantages over the preceding list: the account of nearly two hundred additional half-pennies, the alphabetical arrangement, and the copiousness of its descriptions' (Sheplard, 1798, 213);<sup>2</sup> 'and an appendix . . . appeared soon afterwards' (ibid. 120). This must refer to the six-page Supplement, which includes

by Hammond) was apparently dated not 1794 as he states but 1795 (Dalton and Hamer, p. [3]; no copy traced). Miss Banks bought a copy of 'Mr. Spence's publication on tokens' on 16 May 1795.

<sup>&</sup>lt;sup>1</sup> Here, as elsewhere, I have modernized punctuation and capitalization.

<sup>&</sup>lt;sup>2</sup> According to Sheplard it was published 'in the beginning of' 1795; but the 'preceding list' (published

at least one die dated 1796 (rev. H below). A person signing himself R. Y., who on 20 February 1797 had called at Spence's shop 'not long since' (1797, 269), on 7 May wrote to the Gentleman's Magazine (1797, 471): 'I have been informed that Mr. Spence has quitted the business of dealing in coins.' This provides the terminus ante quem; but in the following year Sheplard recalled (1798, 122) that 'before the commencement of the year 1797 a considerable change had taken place . . . the dealers were fewer in number . . . Spence . . . became a bankrupt'. Although he is unlikely ever to have been so formally in business nor his financial position ever so sound as to justify the term bankruptcy, I see no difficulty in accepting that it was late in 1796 that Spence gave up dealing in tokens.¹ About the same time he moved from the 'Hive of Liberty' in Little Turnstile (to which some of his dies refer) to 9 Oxford Street: Place (MSS., 190) dates this to 1796; his Rights of Infants, its preface dated 19 March 1797, announces that he is 'lately removed'.

In spite of his continuous poverty, and the increasing repression which culminated for Spence in his 'important trial' of 1801 followed by a year's imprisonment, he persevered in his 'earnest desire to benefit mankind' (*Gentleman's Magazine*, 84 (2), September 1814, 300). A group of followers gathered about him, and indeed the Society of Spencean Philanthropists became the only group of English Jacobins to survive the French Wars. They were joined by Arthur Thistlewood, Thomas Preston, and the two Doctors Watson, who were all involved in the Spa Fields riot of December 1816 (and Thistlewood in the Cato Street Conspiracy, 1820); as a result, the Spenceans were by name suppressed and prohibited in the Act against Seditious Meetings and Assemblies, 1817 (57 Geo. 3, c. 19, s. 24). Spence's Plan remained influential for some years, but Miss Rudkin (1927, 191–202) has traced a movement of opinion in the eighteentwenties from Spence to Robert Owen; who himself, she argues, nevertheless merely adopted and added to Spence's ideas.

Thomas Spence, however, had died on 1 September 1814.<sup>2</sup> He retained some tokens to the last, for at the end of a new periodical, *The Giant Killer*, which he started on 6 August 1814, there is a note that 'With every first number sold will be given an appropriate medal wrapped up in a song, GRATIS'; and at his funeral on 8 September 'his medals were distributed to the crowd as the procession passed along, [and] many medals were thrown into the grave' (Evans, 1821, 3–4).<sup>3</sup>

# SPENCE'S DIES

It has been stated that Spence did not manufacture tokens himself (Farnell, 1958, 450; and in Bell, 1968, 165); and it may indeed be true that he did not himself own a coining press. Pye (1801, 2) listed Spence among the manufacturers, but relied on others (Miss Banks, the die-sinker Milton, Mr. Young) for his information about London. Place (MSS., 182) declared only that he 'caused several [tokens] to be struck for his own use'. Thomas Evans, who was a Spencean by 1797/8 at the latest (Thompson, 1968, 177; 182; 188), recalled that he 'continued . . . to strike medals', but had earlier stated

Jan and Mr. P. Clayton concluded that Spence's grave, in the burial ground of St. James's on the eastern side of Hampstead Road (Waters, 1917, 7), was probably destroyed in the construction of the railway into Euston.

<sup>1</sup> Cf. farthing obv. 13.

<sup>&</sup>lt;sup>2</sup> Place (MSS.), 140; the *Dictionary of National Biography* gives the date of his burial.

<sup>&</sup>lt;sup>3</sup> Unhappily for the prospect of Spence's tokens appearing in future 'grave goods', the late Mr. A. W.

that Spence 'had medals struck' (1821, 2–3). It will become clear from the passage quoted below and subsequent argument, however, not only that tokens were manufactured in the quantities ordered by Spence, 'published and sold' by him, but also that dies were produced for him, used under his control on blanks obtained by him, and sold by him. For most purposes, therefore, it is of no importance whether Spence was a proprietor who also owned his dies, or a manufacturer owning a press. One may conclude with Mitchell (1821, 427–8) that 'Spence either struck, or caused to be struck, a variety of copper coins, some of which were extremely curious'.

The evidence for the sale of Spence's dies comes in the letter from R. Y. to which reference has already been made (1797, 471):

I have been informed that Mr. Spence has quitted the business of dealing in coins, and has disposed of his dies principally, if not entirely, to a dealer in Holbourn. I think I can easily enumerate above 40 dies of the half-penny size, and 13 of the farthing, originally struck for Spence, and which, being now transferred to another dealer, will probably... be interchanged for the purpose of accommodating collectors.

This shows why it is necessary for a careful argument to identify Spence's dies. I deal first with those of halfpenny size.

### DIES NAMING SPENCE

It is hardly to be doubted that the following ten dies (*obvs.* A–F, *revs.* A–D),<sup>2</sup> which either name him or have a documented connection with him, were produced for Thomas Spence (or, in the one case, his brother Jeremiah; Pye, 1801, xxxviii. 2), and that with the exception of *obv.* and *rev.* A they were used by him.

Obv. A: +spences glorious plan / is parochial partnership in land / without private land-lordism + / the sun in rays, at the centre .+. spences-plan / nov 8 / 1775 /

[Plate VIII, obv. A

Spence would probably have described the design as the 'meridian' sun, the title of one of his publications (1796). It occurs only with the following die (DH, Middlesex 676, and on a farthing-size blank 1076).

Rev. A: THIS JUST PLAN / WILL PRODUCE EVERLASTING PEACE AND HAPPINESS / OR IN FACT THE MILLENIUM [sic] / a pair of scales, an olive branch above, a cornucopia of fruit below.

[Plate VIII, rev. A

Arthur Waters (1954, 17) assigns this piece to Spence's Newcastle period, solely it appears on account of the date it bears—which is of course the day of his lecture. Inasmuch as he immediately had his lecture printed, he might also have had a medal struck; but he could just as well have produced it at any time up to his death. It is described by Place (MSS., 182); perhaps by Evans (1821, 2) as the 'medals struck in copper, shortly explanatory of his system', immediately before mentioning his move to Little Turnstile; and described perhaps from memory, by Mitchell (1821, 427–8) as a coin which 'had on one side an inscription in favour of liberty, and on the other a rising sun', and which 'was requested by him to be put into his coffin, but we know not

1 i.e. Peter Skidmore; see obv. N/rev. OO.

'becomes an obverse with the following dies'; though unavoidably there remain some obverse and reverse mules. Between the dies identified as likely or certainly Spence's, however, there are only seventeen, fifteen of them rare, some of which may have been produced by Skidmore.

<sup>&</sup>lt;sup>2</sup> I have called the dies a consistent obverse or reverse according to the majority of their links, taking Spence's *Head* as an obverse (see Table II). This makes unnecessary the frequent but unconvincing instruction in Dalton and Hamer that such and such a reverse

whether his request was attended to'. I have found no earlier reference to it, quite possibly because it was seen to be a medal and not a token.

There are, however, various hints, insubstantial in themselves, which cumulatively point to a narrower period for its production. It does occur with Spence countermarks (Batty, 1878, 4755; Waters, 1906, 52), and so preceded that venture if it was not contemporary with it. The lack of die-linking suggests that it is to be separated from his main token period (1795-6), possibly by his seven months' imprisonment (1794). The words 'the millennium' he also uses in the title of a 'Song to be sung at the commencement of the milennium' in Pigs' Meat, i, 42 (the awkwardness of its use on the medal might indicate an earlier unfamiliarity); two or three years later, however, the song is for 'the political milennium' (1796, 11), probably to distinguish Spence's goals from the millenarian fantasies among the poor which suddenly, after a century or more, reemerged in 1793-4 (Thompson, 1968, 127-30); that he would distinguish them is confirmed by his words at the 1801 trial: 'For religious People look for such a [future blessed] State under the Notion of a Millenium' (1803, 57); and in a later broadside Spensonia is only 'a millenium' (1805); it seems likely, therefore, that Spence would not have used the words 'the millennium' much later than 1793. Within the years 1775–93 it is perhaps more likely to be at the end of this period that Spence had this medal struck, since it was in London that he was most active in propagating his Plan, and produced his tokens. It may therefore be tentatively dated as c. 1793(?)

Obv. B: [His Head] + T\*SPENCE+7 MONTHS IMPRISOND FOR HIGH TREASON+ / 1794 [the 4 reversed] / bust left, James below. [Plate VI, obv. 1]

Spence (1795s), 418; B. London 98.2 Miss Rudkin says of this bust (1927, 35), 'There are lines of humour about his mouth. His eyes are of the downward piercing type that can gleam with humour or blaze with fanaticism.' He appears to be dressed in the French Republican mode, 'with unpowdered hair hanging loosely down behind—his neck nearly bare' (quoted Thompson, 1968, 139).

Another head is described by Spence (1795A, 359) as bearing the legend 'In goal [sic] or abroad, whatever betide, my struggles for freedom shall be. 1795' (he uses the same words in Pigs' Meat, iii. 250). Although no specimen had ever been seen (Waters, 1954, 50), it was unfortunately adopted in the Addenda to Dalton and Hamer (Middlesex 676 bis). Since it appears in Spence's Addenda and not in the subsequent Supplement, which first records the known die, it is best taken (unless and until a specimen turns up) to be obv. B as originally planned; perhaps James found the legend too long.

<sup>1</sup> In Spence's usage the word must bear its secular sense of 'a period of happiness and benign government', which the Oxford English Dictionary does not record before 1820; but see, in addition to Spence, the quotation from Thomas Holcroft at Thompson, 1968, 120. Spence had, not surprisingly, read the Book of Revelation (Rudkin, 1927, 16); if he was one of the first to make secular use of 'millennium', the vision of rev. J would explain it.

<sup>2</sup> I supply the earliest record I have found of each certain and likely Spence die, partly as material for any study of the originality (or otherwise) of his satire; Birchall (1796), halfpennies and farthings, so often provide this record that I abbreviate them to 'B.'

Spence gives the legend of obv. B as 'Seven months imprisoned for high treason in 1794' (my italics); therefore he may not have intended it to be engraved as though this were the date of the coin. In view of the following note (Spence, 1795A, p. 51), I believe that such dates as appear on his tokens are normally to be trusted as the year of production: 'As coins are liable to be seen by future generations, it is lamented by connoisseurs that many of those of the present day are published without a date, which will render it difficult for posterity to judge of the time of their utterance. This objection, it is hoped, engravers will for the future be careful to obviate . . 'This may account for the attempt to obliterate the date on rev. F.

Rev. B: [Three Thomas's] THO\$ SPENCE / Sir THO\$ MORE / THO\$ PAINE / \*NOTED ADVOCATES FOR THE RIGHTS OF MAN. / [Plate VI, rev. 2]

Spence (1795), 269. *Pigs' Meat* is collected by 'the poor man's advocate'; likewise at his trial in 1801 Spence called himself the 'unfee'd advocate of the disinherited seed of Adam', and according to the *Morning Chronicle* likened himself 'particularly to Hampden, Sir Thomas More, and the great champions of British freedom' (Rudkin, 1927, 115). A die with three men hanging, and the legend NOTED ADVOCATES FOR THE RIGHTS OF MEN/1796 (DH, Middlesex 837–8) must be a parody of *rev*. B; cf. FO 11.

Obv. C: [Pig] Pigs meat Published by T. Spence London / 'a boar treading upon coronets, mitres, &c. and above a cap of liberty' (Spence, 1795, 269). [Plate VI, obv. 2]

Rev. C: [9-line bookseller] t / spence / bookseller / dealer in / prints & coins / n 8 / little / turnstile holbor(n) / london / [Plate VIII, rev. C

The London locality has regularly been transcribed as HOLBOB OF HOLROR, and Spence's engraver criticized for such a mistake. The letters are certainly ambiguous (examination under a microscope suggests if anything HOLROB); but I believe it is to be read correctly as HOLBORN, with the N in COINS serving a double purpose.

Obv. D: [8-line bookseller] t / spence / bookseller / .+\*+. / dealer + in / .+\*+. / + prints+ / .&. / coins / little turn-stile Nº 8 holborn london / a radiation above.

[Plate VIII, obv. D

The absence of any early record of impressions from this and the previous die presumably indicates that they were considered to be shop tickets rather than tokens.

Rev. D: [Indian] IF RENTS I ONCE CONSENT TO PAY / MY LIBERTY IS PAST AWAY / a North American Indian, right.

[Plate VII, rev. 12]

B., appendix, London 188. On 2 February 1796 Spence published an engraving, signed by his son W. Spence, in which a Disappointed Missionary addresses some Red Indians: 'God has enjoined you to be Christians to pay rents and tythes and become a civilized people.' They reply: 'If rents we once consent to pay / taxes next you'll on us lay / and then our freedoom's [sic] pass'd away'; the die obviously shares the same origin. A similar engraving dated 1 February 1796 points the Contrast between two Red Indians and 'the civilized Ass'.<sup>1</sup>

Obv. E: [Double-loaded Ass] I was an ass to bear the first pair + / an ass with a human (?) face, bearing two pairs of panniers, the lower both labelled rents, the upper tax's. [Plate VII, obv. 12]
B., London 185–8. The engraving just mentioned has the doubly laden ass saying: 'I'm doomd to end-less toil and care / I was an ass to bear the first pair.' The sequence of thought is thus explained in Spence's words (1796, 10): 'When a people create landlords, they create a numerous host of hereditary tyrants and oppressors, who not content with their lordly revenues of rents, seize also upon the government . . . and take . . . enormous salaries for the places they occupy therein . . .; so that . . . the poor dull ass the public become thus loaded, as it were, with two pair of panyers.'

Obv. F: \*J SPENCE\*SLOP-SELLER\*NEWCASTLE\* / a sailor right, JAMES below. [Plate VI, obv. 9 Virtuoso 37, dated 24 November 1795, with obv. O. Although a mule in respect of the majority of Thomas Spence's dies, these two probably formed the original pair, which

<sup>1</sup> A copy of the *Disapointed* [sic] Missionary is bound into vol. i of one of the sets of Pigs' Meat in the Goldsmiths' Library. In vol. ii of the same set is

The Contrast, and another copy of it is preserved in the set of *Pigs' Meat* in the British Museum (Department of Coins and Medals). Spence separated to use both as obverses; cf. obv. X. For his brother Jeremiah see Mackenzie (1827) i. 399–401; he was a zealous Glassite (or Sandemanian), and whereas Thomas wished to revolutionize society, 'Jeremiah and his friends actually "revolutionized" their small religious society' (Rudkin, 1927, 22). 'Slop' has been explained as saloop, hot sassafras, but in Spence's dictionary (1775) it is 'a pair of trousers', and 'slops' are defined as loose trousers, especially those worn by sailors.

# SPENCE'S SUPPLEMENT

Sheplard describes the Supplement to Spence's Coin Collector's Companion (1795s) as 'chiefly containing an account of Spence's own coins' (1798, 120). This is indeed so, as some economies that Spence made in cataloguing permit one to recognize. No. 376: Deserted Village, rev. Britannia, is followed by 376 (2): Ditto, rev. Shepherd, and so on, up to 376 (9): Ditto, rev. Heart in Hand. Five subsequent entries (377, 397, 398, 408, 418) are described as having the same reverses as Deserted Village. However, of the fifty-four tokens which should have resulted from these combinations of dies, a total of twelve are not recorded elsewhere, even by the industrious Birchall or the comprehensive Conder. In view of the numerous contemporary collectors of these tokens, this seems too many just to have slipped out of existence; they were therefore listed by the man who owned the dies and supposed he would produce them all—but never did. The obverse of 418 has already been identified as Spence's (B), and likewise reverse 8 (B); the remaining thirteen dies are described below (obvs. G-K, revs. E-L).

- Oby. G: [Deserted Village] one only master grasps the whole domain + / 1795 / a village in ruins. [Plate VI, oby. 5]
- B., London 115 (with rev. F). The legend is a line from Goldsmith's Deserted Village, which was quoted in Pigs' Meat, i. 33, in an extract headed 'A lamentation for the oppressed'. This was a theme which touched deep sources of feeling in the memories of Jacobin journeymen and artisans (Thompson, 1968, 157; and for the human side of the enclosures, 237–58).
- Obv. H: [Dudley Castle] DUDLEY TOKEN / a castle beyond trees, JAMES below. [Plate VI, obv. 8 Spence (1795), 99, with rev. F. Failing any obvious Spencean significance, these might originally have been stock dies of James's, who had formerly worked in Birmingham.
- Obv. I: [Press gang] \*BRITISH\*LIBERTY\*DISPLAYED\* / 1795 / 'a press-gang dragging away an impressed man' (Spence, 1795s, 397). [Plate VII, obv. 11
- B., London 31–7. No institution was as much hated as the press gang in the eighteenth century (Thompson, 1968, 88).
- Obv. J: TREE OF LIBERTY / 'the head of the protector of men's liberties upon a pole in glory, and the people dancing round it' (Spence, 1795s, 398). [Plate VI, obv. 4]
- B., London 38-45. A tree of liberty was a post or tree set up by the people from the time of the War of American Independence, hung with flags and devices, and crowned with a cap of liberty (Brewer's *Dictionary of Phrase and Fable*). Here the *bonnet rouge* is replaced by a radiated head which is clearly that of Pitt; a Wilkite print of 1768 had similarly described Bute in ironic terms as the 'Protector of our liberties' (George, 1959a,

plate 42). Pitt appears to have taken such propaganda to heart: 'My head would be off in six months, were I to resign', he remarked to Wilberforce in November 1795. Cf. rev. PP.

Obv. K: BEFORE THE REVOLUTION / 1795 / 'Oppression and want. A skeleton of a man in chains, gnawing a bare bone' (Spence, 1795s, 408). [Plate VII, obv. 14]

B., London 81-6. The design appears to have been suggested by a description of the Bastille the morning after its capture, quoted in *Pigs' Meat*, iii. 261-2: '. . . the great stone in the midst of each [dungeon], which served the double purpose of a bed and a chair; the chain in the middle of the stone'. Cf. rev. DD.

Rev. E: [Britannia] ROUSE BRITANNIA! + + / 'Britannia confounded and the cap of liberty falling to the ground' (Spence, 1795s, 376 (1)). [Plate VI, rev. 1]

B., London 34.

Rev. F: 'A Shepherd reclined at his ease under a tree; sheep, &c.' (Spence, 1795s, 376 (2)) / 1790 / [Plate VI, rev. 8]

Spence (1795), 99, with obv. H (q.v.). In most occurrences the date has been partially obliterated; cf. footnote to obv. B.

Rev. G: [Armed citizens] + WHO KNOW THEIR RIGHTS AND KNOWING DARE MAINTAIN / 1795 / three armed men. [Plate VI, rev. 5]

Spence (1795s), 376 (3); B., London 31. The legend is taken from Sir William Jones's 'Ode in Imitation of Alcaeus', quoted in *Pigs' Meat*, i. 59: 'What constitutes a State?...

Men, who their duties know, But know their rights, and knowing, dare maintain'.

The design is possibly an exhortation to the 'few thousands of hearty, determined fellows, well armed' who would be required to put Spence's Plan into action, 'but if the aristocracy arose to contend the matter, let the people be firm and desperate, destroying them root and branch' (1796, 8); or even an anticipation of Spensonia, where all men in the parish were to be trained in the art of war in order to be able to defend their own property. The right of individuals to bear arms in their own defence was claimed by reformers (Thompson, 1968, 88). There is some slight though inconclusive evidence that Spence himself dared maintain (Howell, 1818, 693-4; cf. Thompson, 1968, 176-7).

Rev. H: [Soldiers embracing the people] WE ALSO ARE THE PEOPLE / 1796 / two soldiers, one of them shaking hands with two citizens. [Plate VI, rev. 4]

B., appendix, London 209. The legend comes from the fifteenth chapter of the Comte de Volney's *Ruins of Empire*, frequently reprinted in the seventeen-nineties (e.g. in *Pigs' Meat*, i. 69–73), and a work second in influence in Jacobin circles only to Paine (Thompson, 1968, 107–8). A nation divides itself into a labouring class and a privileged class; the military governors step forward from the latter, saying: 'The people are timid, let us menace them; they only obey force. Soldiers, chastise this insolent rabble!' The people reply, 'Soldiers! You are of our own blood; will you strike your brothers?' And the soldiers, grounding their arms, said to their chiefs, 'We are also the people.' The Incitement to Mutiny Act was passed in 1797.

Rev. I: [Cock and lion] LET TYRANTS TREMBLE AT THE CROW OF LIBERTY / 1795 / 'tyranny in dismay.

A lion trembling at the crowing of a cock' (Spence, 1795s, 376 (5)). [Plate VI, rev. 10]

B., London 32. The animals are of course the Gallic cock and the British lion.

Rev. J: AFTER THE REVOLUTION / three men dancing and a fourth feasting below a tree.

[Plate VII, rev. 14

B., London 140. Spence, 1795s, 376 (6), describes the design as 'a prospect of happiness and plenty'; cf. note to rev. A.

Rev. K: [George III/Ass] ODD\*FELLOWS / A MILLION HOGG 1795 A GUINEA.PIG\* / the heads of George III and an ass back to back. [Plate VII, rev. 11]

B., London 33. Spence, 1795s, 376 (7), describes this as 'New odd fellows'; cf. the earlier obv. L. The 'million hog' are presumably the swinish multitude alias 'the poor dull ass the public'; the other head perhaps a 'pig' as on a guinea. The interpretation of the design is rather difficult. The head vertically divided into contrasted halves was a favourite device to indicate a double personality, and also to make one person out of two, usually in sinister co-operation (George, 1959a, 6). This would seem to apply to the 'Even fellows' of FO 5. However, this and the other 'Odd fellows' design (obv. L) appear to make a point of opposition (cf. FR 3) between contrasted characters. Even so, it is difficult to accept that the head of the King could have been joined to that of an ass without any intent to ridicule; perhaps there was an intended ambiguity.<sup>1</sup>

Rev. L: [Heart in Hand] HONOUR / a heart in the palm of a right hand, between two laurel branches, JAMES below. [Plate VI, rev. 3]

Spence (1795), 256, with *obv*. L, a time when he had not begun to mule halfpennies; nevertheless, I can make no serious suggestion as to the significance of the device, unless it be merely a representation of Honour. Spence includes the familiar sense of courage for the word 'Heart' in his dictionary (1775). In a broadside a song of his includes the lines 'Then let us all join heart in hand . . . To haste this golden age's reign' (1805).<sup>1</sup>

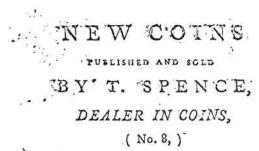
# THE HANDBILL

The document here reproduced is taken from a copy (perhaps the only surviving copy) bound at the end of an issue of Spence's catalogue (1795s) in the Goldsmiths' Library in the University of London; the volume was purchased by Professor H. S. Foxwell, probably in the early eighteen-eighties.<sup>2</sup> It was reprinted by Waters (1917, 11), and from this source by Dr. Bell (1968, 165), with the following comment by Mr. J. R. Farnell: 'The greatest joke [sic] of it all are those certain pieces [sic] listed that Spence had no part in, and at a quick glance I count ten dies that are Skidmore's.' A footnote identifies these as obvs. 4, 6, 18, 19, and revs. 2, 6, 9, 11, 17, 18. However, the evidence for identifying these dies as Skidmore's has not, to my knowledge, been published; the grounds for not accepting them are given in this paper. It is apparently accepted that the handbill dates from the seventeen-nineties, but supposed that it was issued either:

<sup>&</sup>lt;sup>1</sup> See Addendum.

<sup>&</sup>lt;sup>2</sup> I am grateful to the Goldsmiths' Librarian for this information.

(a) by political opponents of Spence to 'frame' him before the authorities: but it is difficult to think of a less likely vehicle for achieving this than a bare list of dies innocuously described (whatever the designs to which they refer); or



LITTLE TURNSTILE, HIGH HOLBORN.

1. Y IS Head—2. A Pig—3. Odd Fellows—

1. A. Tree of Liberty—5. Deferted Village—6. Head of Mr. Horne Tooke—7. Head of
Mr. Fox—8. Dudley Castle—9. Newcastle Sailor—
10. Newcastle Keel—11. Press Gang—12. A double
Loaded Ass—13. End of Oppression—14. Basisle—
15. Mendoza's Head—16. A Dog—17. A Coining
Press—18. United Token—19. A Snuff Jar with
Pipes and Thistles—20. Head of Mr. Thelwall.

N. B. The above being under Dies, may be faid to be Obverses; and the following being upper Dies, may be struck as Reverses to any of them, which has in general been done. Wherefore when any of the above Obverses are wrote for, let it be mentioned which, or whether all of the following Reverses be wanted.

Reverfes that may be ftruck with any of the

'above Obverses, viz.

1. Britannia—2. Three Thomas's—3. Heart in Hand—4. Soldiers and People embracing—5. Armed Citizens—6. Sessions House, Old Bailey—7. Mercury's Scepter—8. Shepherd—9. An Anchor—10. A Cock and Lion—11. New Odd Fellows—12. An Indian—13. Cain and Abel—14. Dancing—and Feasting—15. Two Boxers—16. A Cat—17. A Guilotine—18. Crown, Harp and Thissles—19. A Highlander—20. A freeborn Englishman.

Fig. 1.

(b) by Skidmore: but there would seem little point in his giving Spence's name and address, and little purpose in the operation since Spence's pieces, after the token mania of 1795, seem never to have been particularly sought by collectors: 'they may possibly be induced, therefore,' R. Y.'s valuable letter continued (1797, 471), 'to take the hint I suggested of contenting themselves with one impression from each die'; a hint which could have been taken from his opinion of the political tokens expressed nine months earlier.

On the other hand, the following points demonstrate the authenticity of the handbill:

- 1. There is no bibliographical or textual reason against dating the handbill to 1796 and attributing it to Spence: 'wrote' is a regular past participle in the eighteenth century; the complex construction is of course classical. Significantly, 'keel' is or was a term local to the east coast from the Yare to the Tyne.
- 2. Nineteen of those dies listed have already been identified as Spence's; given Spence's own descriptions, possibilities of mis-identification occur only with obvs. 9 (see obvs. F and X), 14 (see rev. DD below), revs. 2 (see rev. B, FO 11), and 9 (see revs. O, EE, and obv. II). It is unnecessary to particularize the identifications, since the illustrations have been arranged according to the numbers of the handbill, for a reason that will appear.
- 3. The remaining twenty-one descriptions can be readily found among the dies not merely linked with the preceding, but those most heavily linked (see Table II). This is significant because it is Spence who is most likely to have used his own dies with each other; some may have broken up,<sup>2</sup> or otherwise not passed to Skidmore; others the latter may never have used. It is not impossible that individual Skidmore dies should have been intensively linked into the Spence series in addition to others of Skidmore's; but, in fact, the only other dies which have three or more links with the twenty-one dies already identified as Spence's are two which are likely to be Spence's (obv. W, rev. Y), and rev. NN.
- 4. The dies are listed correctly as obverses or reverses, as they have been distributed according to the majority of their links with Spence's *Head*, etc.
  - 5. Eleven (or more) obverses are listed at the same number as associated reverses.

# ASSOCIATED DIES

Style cannot be of much help in identifying Spence's dies, since there is no reason why he should not have ordered his dies from more than one engraver; and indeed, the signature of Jacobs occurs as well as that of Charles James, with whom he appears to have had a close relationship. However, dies are normally obtained in sets of two or three; here, as the 1:1 ratio of dies in the handbill suggests, in sets of two. Since a number of the dies were clearly engraved to Spence's designs, it is not surprising to find that a proportion of them form pairs associated by similar or opposite sentiments.<sup>3</sup> Those that are not so associated were perhaps ordered in bulk: one or both of the dies numbered 3, 4, 5, 10, and 11 are among the combining dies in Spence's Supplement.

Five pairs of associated dies have already been mentioned. The upper and lower dies numbered 1 in the handbill (and in the plates) produce a coin resembling the types of a regal halfpenny. The dies numbered 2 both advertise Spence, and are first recorded together and with no other die. Numbers 8 might seem to have nothing more in common

other political piece (DH, Middlesex, 1016–17): Obv. A MAP OF . . . FRA-NCE [divided], throne [overturned], HONOR [trodden underfoot], RE<sup>LI</sup>GI<sup>ON</sup> [dismembered], GLORY [defaced], FIRE [in every corner, etc.]/ Rev. MAY GREAT BRITAIN EVER REMAIN THE REVERSE.

<sup>&</sup>lt;sup>1</sup> The handbill does not list all of Spence's dies; neither does it claim to do so.

<sup>&</sup>lt;sup>2</sup> There are in the British Museum impressions from the following cracked or partly broken dies paired with other Spence dies: obvs. J, K, M, S, rev. M.

<sup>3</sup> Such opposition appears more explicitly on an-

than a handsome landscape, but in fact rev. 8 occurs almost exclusively with obv. 8 in its earlier state in which the date is clear. Obv. and rev. 12 are brought together in a print. Numbers 14 are 'Before' and 'After the Revolution'.

I describe below the remaining dies listed in the handbill (obvs. L-V, revs. M-W), mentioning the associations between upper and lower dies that I have recognized.

Obv. L: [Pitt/Fox] odd. + .+. Fellows. / +Quis Rides / the heads of 'Pit sour, and Fox laughing' (Spence, 1795, 256), back to back. [Plate VI, obv. 3]

A 'Pitt & Fox' was bought by Miss Banks on 17 March 1795. The Janus head could just conceivably equate the two, in the attitude of 'Whate'er your parties ye may call, You're all alike, so d'mn you all' (*Pigs' Meat*, iii. 56–7); but it is more likely that, as in rev. K, the 'odd fellows' are contrasted characters awkwardly united in one head.

Obv. M: HORNE TOOKE ESQ. / bust right, JACOBS. F. below.

[Plate VI, obv. 6

B., London 110; and Spence (1795s), 420 with rev. M (only), which depicts the scene of Horne Tooke's trial in 1794.

Rev. M: SESSIONS HOUSE / OLD BAILY / a building.

[Plate VI, rev. 6

B., pennies 23, and 'penny size' also in Spence, 1795s, 420. Having the same low relief, this was no doubt like *obv*. M engraved by Jacobs.

Obv. N: RT.HE.C.J.FOX. / bust right, JAMES below.

[Plate VI, obv. 7

B., London 143. In an altered state the legend reads R<sup>T</sup>.HONORABLE C.J.FOX., with an area of damage visible in DH, Somerset, 46, made into a knot or bow, and the engraver's signature replaced by the date 1797; that this was done by or for Skidmore is demonstrated by one of its links in this state (see Table II).

Rev. N: [Caduceus] we / were BORN / -FREE- / -AND- / WILL NEVER / DIE SLAVE<sup>5</sup> / a caduceus with a crown at one end, a cap of liberty at the other. [Plate VI, rev. 7]

B., London 139. The device appears to unite in opposition like the Oddfellows, making if turned one symbol rise while the other falls; but I cannot explain the significance of Mercury in this context. If the words are Fox's, I have not succeeded in tracing them.

Rev. O: [Anchor] WHEN THIS YOU SEE REMEMBER ME / a crowned anchor with hearts either side.
[Plate VI, rev. 9]

Virtuoso 67, dated 8 March 1796. I believe that Dr. Bell is right to associate this design with the Crown & Anchor Tavern in the Strand (1968, 178), but not to see in it an allusion to a 'respectable' meeting there on 15 February 1793 to raise a fund for war wounded and widows, which it is not known whether Spence attended but 'it is in character that he would'. Just conceivably it is a threat to the Crown & Anchor Society, or Association for Protecting Liberty and Property against Republicans and Levellers, which Spence named (1792, 4–5) as having instigated the first prosecution of him on 6 December 1792. However, the likeliest explanation is that it refers to the Tavern as the meeting-place of the Whig Club (cf. obv. N), and in particular to the public dinner there on 4 February 1795 to celebrate the acquittal of Hardy, Thelwall, and Horne Tooke. Spence wrote to the Morning Chronicle (3 January 1795) to remind the patrons of the 'Martyrs of Freedom' that he was of their number and much in need of assistance; to his chagrin he was completely ignored. He expresses this in Pigs' Meat, iii. 56–7, in

verses 'On the late barren patriotic meetings', especially that on 4 February. The only difficulty in taking the legend to be an expression of the same sentiment is the absence of the die from Birchall. Cf. rev. EE, obv. II.

Obv. O: [Keel] \*COALY X TYNE\* / 1795 / a man in a Tyne barge or 'keel', left. [Plate VI, obv. 10 Virtuoso 37, 24 November 1795, with obv. F (q.v.). The die soon broke (after twenty-six impressions according to Pye, 1801, xxxviii. 2), and in its other pairings lacks the sea ahead of the vessel, and the first two figures of the date. Cf. rev. QQ.

Obv. P: + + THE END OF OPPRESSION + + / two men exulting over a bonfire of title deeds, etc. [Plate VII, obv. 13

B., appendix, London 232–40. The enclosures were effected by taking over common lands of which the villagers could provide no documentary proof of ownership (cf. Thompson, 1968, 237–9). Spence's work with the same title as the legend (1796, 8) describes how his Plan is to be put into operation: a committee in each parish will issue a manifesto or proclamation that every landholder should, on pain of confiscation and imprisonment, immediately deliver up all writings and documents relating to his estates, that they might immediately be burned. Cf. the legend of the next.

Rev. P: THE BEGINING [sic] OF OPPRESSION. + [the Ns reversed] / CAIN. ABEL / Abel slain by Cain.
[Plate VII, rev. 13]

B., appendix, London 196. Its meaning is made clear by a remark in the *Giant Killer*, No. 2, 13 August 1814, p. 10: 'Abel seemed to resemble the commonalty, Cain the nobility.' According to Spence, the first landlords were tyrants and usurpers, and those who have since possessed the land have done so by right of purchase or inheritance from them.

Obv. Q: \*D.MENDOZA\* / head left.

[Plate VII, obv. 15

B., London 225–6. Daniel Mendoza was a famous boxer, and the following might be significant in relation to Spence: 'About the year 1787... [he] set up a school to teach the art of boxing as a science, the art soon spread among the young Jews and they became generally expert at it. The consequence was in a very few years seen and felt too. It was no longer safe to insult a Jew' (Place, MSS. 27287, 145–6, quoted M. D. George, London Life in the Eighteenth Century, 1966, 137–8). Mendoza could be the figure on the right of the next die.

Rev. Q: [Boxers] \*FASHIONABLE\*AMUSEMENT\* / 1790 / two men boxing. [Plate VII, rev. 15] B., London 149. If the year is the date of production, it is unlikely to have been ordered by Spence; if that of a famous encounter, I have not been able to trace it. Is it perhaps merely a die-sinker's error for 1796? Those who have taken the legend literally may be right, though it is worth noting that both words may be depreciatory. See Addendum 3.

Obv. R: [Dog] MUCH GRATITUDE. BRINGS SERVITUDE. / a dog left. [Plate VII, obv. 16]
B., London 133. The 'poor dull ass the public' here finds a different incarnation, and is contrasted with the next dies.

Rev. R: [Cat] MY LIBERTY I AMONG SLAVES ENJOY / 1796 / a cat, right. [Plate VII, rev. 16A]
B., London 164.

Rev. S: [Cat] MY FREEDOM I + AMONG SLAVES ENJOY + / 1796 / a cat, right. [Plate VII, rev. 168] B., London 133. There is nothing to suggest that these are not both Spence's dies, one presumably replacing the other. According to Mackenzie (1827, i. 401), Spence used to designate the cat his coat of arms, because he resembled it in that he could be stroked down, but would not suffer himself to be rubbed against the grain.

Obv. S: COINING / PRESS\* / INSCRIBED TO COLLECTORS OF MEDALS / \*1796 / a screw press.

[Plate VII, obv. 17

B., London 137–8. This is not recorded with the next die, and I have not counted them among the associated pairs. Nevertheless, both bear a representation of a mechanical device, and it is not inconceivable that Spence when listing them intended that the guillotine should be 'inscribed to collectors of medals'.

Rev. T: [Guillotine] HALFPENNY. / a guillotine set up outside a town house. [Plate VII, rev. 17] B., F6 (with obv. EE), London 45. Waters is probably right that this was engraved by Jacobs, but not that the die was therefore not used by Spence (1906, 47). It may, however, have originated as a Skidmore die, finding its proper obverse in EE, which has a similar beading. From 1793 even into the eighteen-thirties the guillotine was the emblem of horrific revolutionary ruthlessness (George, 1959a, 205).

Obv. T: UNITED TOKEN / a radiated head, right.

[Plate VII, obv. 18

B., London 182–3. This has been described as the head of George III; I am not convinced that this is so. It is possible, however, that it was intended to produce with the next a coin resembling an Irish regal halfpenny (cf. obv. B/rev. E).

Rev. U: [Harp, etc.] ENGLAND\*IRELAND\*SCOTLAND / +1796 / a harp, crowned, with two thistles below. [Plate VII, rev. 18]

B., London 138. The design hardly alludes to the union of Ireland with the kingdoms of England and Scotland, for this was not broached until 22 November 1798 (George, 1959b, 43). In conjunction with *obv*. T, there is little doubt that it refers to the United Irishmen, the United Englishmen who were mainly an auxiliary of the first, and the attempts to form a general combination with Scottish reformers (Thompson, 1968, 111–203). Thomas Evans, Spence's follower and successor, as last secretary of the London Corresponding Society in 1798 signed an Address to the Irish Nation 'which redeems the English from the charge of total complicity in the Irish repression' (ibid. 188); he was involved in the activities of Father O'Coigly on behalf of the United Irishmen; and on his arrest a copy of the oath to be taken by the True Britons (United Englishmen) was found in his pocket (Rudkin, 1927, 97–9).

Obv. U: [Snuff-jar] +saint andrews street edinburgh. + / 1796 / a snuff-jar bearing the figures 37, tobacco pipes above, thistles beside. [Plate VII, obv. 19

B., appendix, E26. This was designed for Campbell's Snuff Shop (*rev.* BB) at the above address, as proved by a similar pair of dies dated 1795 (DH, Lothian, 13) and recorded in Spence (1795), 380. It has been stated that the 37, and the 79 that appears in 1795, are street numbers; but the 1796/7 to 1804/5 Edinburgh directories give Campbell & Co., or E. Campbell, tobacconist, at No. 2 St. Andrew Street. Spence's use of this die will

<sup>&</sup>lt;sup>1</sup> I am indebted to the Edinburgh City Librarian and Curator for this and other information.

be discussed for rev. BB. The association with the next die is rather obvious, but not for that reason unreal.

Rev. V: [Highlander] THE GALLANT GARB OF SCOTLAND + / a highlander, left. [Plate VII, rev. 19 B., London 136–7.

Obv. V: JOHN THELWALL / bust right, JAMES below.

[Plate VII, obv. 20

B., appendix, London 256–9. For Thelwall see Thompson (1968), 172–6, and 96 note 1 for the possibility that he was particularly connected with the design of the next die (it was especially the liberties of the supposed Anglo-Saxon constitution that were attributed to the 'free-born Englishman'); I have not, however, counted these among the associated pairs.

Rev. W: A FREE-BORN+ENGLISHMAN / 1796 / a man shackled, his hands tied behind his back, his mouth padlocked. [Plate VII, rev. 20

B., appendix, London 220. The rhetoric of the 'free-born Englishman', protected by the law against arbitrary power, was common to Tory, Whig, and Radical (Thompson, 1968, 84–110). He was particularly threatened in 1796 by the 'Two Acts' passed on the previous 18 December, the Libels (or Gagging) Act (cf. FR 6), and the Act against Treasonable and Seditious Practices which made it possible to speak or write as well as act treason (but not to coin it).

# THE DIE-LINKS

As Table II demonstrates, there is a superabundance of linking between Spence's dies, even if not perhaps as extensive as his remark in the handbill might lead one to expect. It has been suggested that the columns and rows could be rearranged until the links formed a solid block, to show the chronology of the use of the dies; but this depends on the assumption that dies were used consecutively (whereas the handbill shows that there were at least forty dies in existence at the same time), and each with every die at the time available, an unjustified assumption here. Whatever the purpose, there is little doubt that the intention was to produce a variety of combinations.

I have relied for a record of the die-links on the magnificently illustrated work of Messrs. Dalton and Hamer, which I have supplemented with the purely textual works of Atkins (1892) and, with misgivings, Batty (1870–1). Without access to a comprehensive collection (the British Museum has comparatively few pieces), such reliance was unavoidable if this paper were to exist, and I have very much stood on the shoulders of these giants. Dalton and Hamer, nevertheless, inspire confidence in their die identities (when these cannot be confirmed from their illustrations, normally possible when they have been dispersed through different counties) because they did care 'whether a waist-coat had three or four buttons, or if the forehead of a bust lined up with the N or Y of PENNY', this indicating of course a different die or the different state of a die; the only defects on this score are attendant on publication in parts. Secondly, for confirmation of the die-links, the compilation of their corpus appears to have extended to a cooperative effort of public and private collections, which thus enabled them to indicate rarity; when their record depends solely on Atkins, they admit the fact; though one dismaying exception to their reliability has been noted under obv. B.

On the grounds of the number of links with the preceding certain Spence dies, their early date, or the lack of links with other dies, the following may be identified as likely to have been Spence's (obvs. W-CC, revs. X-AA). Although the 'costume' dies are certainly of a character different from most of Spence's (though comparable with such as the Highlander, rev. V), they all appear to date from 1796, a year in which 'the coinsellers saw with reluctance the decline of their trade' (Sheplard, 1798, 120-1); and Spence may have been compelled to concentrate on making a living. Pitt was consolidating the apparatus of suppression under the Two Acts, and it does appear that in the tokens as in the prints 'the works of genius are substituted for the fruits of sedition' (True Briton, 12 March 1796, quoted George, 1942, xvi).

Obv. W: LD GEO GORDON DIED IN NEWGATE NOV 1 / 1793 / bust in broad-brimmed hat, left.

[Plate VIII, obv. W

Virtuoso 85, 9 May 1796. In an earlier state without the legend it is recorded only with rev. X.

Rev. X: LORD / GEORGE / GORDON / 1780 /

[Plate VIII, rev. X

Virtuoso 60, 4 February 1796, with *obv*. W in its earlier state. Since this pairing is recorded only with the SPENCE X. . . edge (see below), it is clear that both dies were originally Spence's. 1780 is the year of the Gordon Riots, and these dies no doubt symbolize the power of the mob, approved at first by the City of London authorities, but which they did not dare to use, nor most reformers choose, after the French Revolution (Thompson, 1968, 77–8).

Obv. X: A TRUE HEARTED + SAILOR ++ / a sailor right, holding out a bowl, JAMES below.

[Plate VIII, obv. X

Virtuoso 67, 8 March 1796, with rev. O (9). In spite of this pairing, obv. F is more likely to be obv. 9 of the handbill, since there is nothing to associate this sailor particularly with Newcastle, the die with which obv. F formed a 'true' pair is listed in the handbill, and it survived to be paired with a die dated 1797 (rev. QQ). Cf. obv. Y.

Obv. Y; +A MARINE SOCIETY BOY+ / a sailor boy, right.

[Plate VIII, obv. Y

Virtuoso 88, 19 May 1796, with obv. X.

Rev. Y: [Turnstile] LITTLE TURNSTILE HALFPEN NY / 17 96 / two boys on a turnstile.

[Plate VIII, rev. Y

Virtuoso 106, 21 July 1796. This doubtless is for Spence's shop in Little Turnstile, and would therefore have been engraved for him.

Obv. Z: A Druid's head between oak branches.

Virtuoso 106, with rev. Y. This copies the tokens of the Parys Mines Company. Cf. however, FR 11, which also links with *Pandora's Breeches* and is not identified as Spence's.

Obv. AA: +A+WESTMINSTER+SCHOLAR+ / a figure in gown and mortar-board, right.

[Plate VIII, obv. AA

Conder (1798), Middlesex 338.

Rev. Z: ++A BLUE COAT BOY++/a figure, right.

[Plate VIII, rev. Z

Conder (1798), Middlesex 312.

Rev. AA: \*A BRIDEWELL BOY\* / a figure with a stick in his hand, right.

[Plate VIII, rev. AA

Conder (1798), Middlesex 313.

Obv. BB: +THE HABIT+OF A SPANIARD+ / a figure in the traditional dress of a Spaniard, right.
[Plate VIII, obv. BB]

Sheplard (1798, 13) believed this to be Spence's.

Obv. CC: +THE HABIT OF A TURK+ / a figure with curved sword, etc., right.

[Plate VIII, obv. CC

Sheplard believed this also to be Spence's (1798, 13).

# **EDGES**

It is a feature of eighteenth-century tokens that they frequently bear impressed on the edge such a statement as the towns in which they could be redeemed. The marking of edges requires specialized machinery, and it appears that this was done not at the time of striking but before the blanks left the factories, especially those in Birmingham (cf. Barnard, 1926, 350); such an edged blank was recently advertised in *Seaby's Coin and Medal Bulletin* (No. 608, April 1969, p. 140, Middlesex 38\*, described as 'Trial piece for edge'). A rolling mill was required to produce the blanks, and in Spence's time there was only one in London (Colquhoun, 1796, 115).

It is clear that tokens were occasionally used as blanks and restruck by other manufacturers (e.g. an example of L/L in the British Museum overstruck on a Lancaster halfpenny of 1794), when the original edge reading would remain. I therefore ignore various rare edge readings occurring with Spence dies in listing his edges:

[Blank];
[Engrailed];
[Milled];
X—PAYABLE IN LONDON >>>2
SPENCE X DEALER X IN X COINS X LONDON X
SPENCE \* DEALER \* IN \* COINS \* LONDON \*3

Quantities of blanks which name Spence on the edge would have been ordered by him, and would hardly have been supplied to anyone else. The following two dies, however, occur with a Spence die and with the SPENCE x... edge, in Campbell's case forming the 'true' pair of dies, and in the case of Pidcock's *Tiger* exhibiting the SPENCE x... edge also with a whole menagerie of his animals. Dr. Bell has taken this to be evidence that some of Spence's stock of marked blanks passed to James when the former became bankrupt (1966, 68; 88); this cannot be correct, for three of the Pidcock pieces are recorded with the Spence edge by Birchall (1796, London halfpennies 156, 157, 160). In both cases, however, the dies are by the same Charles James who engraved most of Spence's dies; and the likeliest explanation is that the pieces were struck in the same

<sup>&</sup>lt;sup>1</sup> This no doubt accounts for the large number of edge varieties recorded by Dalton and Hamer, especially with Birchall's dies (Yorkshire 28, see pp. 554–5), and the new ones discovered since.

<sup>&</sup>lt;sup>2</sup> Obv. H/rev. B, H/F, H/I, H/L, I/B, I/E, I/F, I/K, I/L, K/F, K/G, K/I, L/F, L/G, L/I, M/L, P/F, P/Y. An investigation of Skidmore's die-linking may, how-

ever, show that these edged blanks are his.

<sup>&</sup>lt;sup>3</sup> It might be supposed that the different edges represent successive batches of blanks obtained by Spence. If so, I have not succeeded in arranging chronologically the dies used with them.

<sup>&</sup>lt;sup>4</sup> DH, Middlesex 344, 418, 436, 441, 442, 443; 416 also has the Spence edge.

workshop and at the same period as Spence's. This does not mean that they need to be considered Spence's dies.

Rev. BB: PAYABLE AT CAMPBELLS SNUFF SHOP / the bust of a Turk smoking a pipe, JAMES / + below See obv. U for the die with which it forms a 'true' pair.

Rev. CC: +ROYAL MALE TIGER / 1796+ / tiger, left, JAMES below.

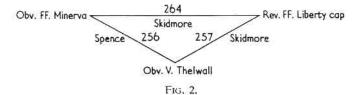
# POSSIBLE SPENCE DIES

It might be thought that all the strong arguments for identifying any die as Spence's had now been exhausted, and that all the other die-links were created by Skidmore after purchasing Spence's dies. R. Y. (1797, 471) believed he could enumerate 'above forty' dies; there are already above fifty. Yet the eleven dies below (obvs. DD-HH, revs. DD-II) are recorded paired with up to three Spence dies at a time when he must still have been in business: by Birchall (1796), whose preface, mentioning his appendix, is dated 30 January 1796, and by Prattent in the dated plates of the Virtuoso's Companion. All the die-pairings are recorded by Dalton and Hamer, and it cannot reasonably be doubted that they existed at the time.

There is some evidence, however, against seven of these dies being Spence's: four with dates (if those of production) which put them outside the two years in which he is known to have produced tokens; six which appear to make a true pair with another die, which in the absence of evidence to the contrary would need to be included as a presumptive Spence die (yet one names Skidmore); one especially bearing a legend antipathetic to all Spence stood for. It is not impossible that he should have used such a die, to create variety, to appeal to a new range of collectors, or even to confound any prosecution; but in view of his 'inflexible integrity', the way 'he could not compromise, and would not have dreamt of concealing his opinions' (Place, MSS., 152), unlikely.

Alternatively, were the Spence dies involved not originally his? This is doubtless true of rev. T, but is incredible with obvs. B, F, O. The remainder all have the links in question recorded in Birchall's appendix (of 'a very considerable number of varieties' which 'fell into the compiler's hands during the printing of the work', therefore probably during January 1796), but also have numerous links with Spence dies incorporated in the body of the work. Consequently, had Spence sold those dies by the relevant date? The fact that, with the exception of revs. K and T they all pair with the Turnstile and other Spence dies which probably did not exist in January 1796 (or they would have been in Birchall) makes this an unlikely explanation.

The following diagram of some die pairings and edges recorded by Birchall shows that there is no easy explanation of the dies alone passing from one to the other by loan, hire, pawn, or theft: edged blanks also are involved.



One is forced to accept that there was some form of contact between Spence and Skidmore before the final sale of dies (their shops were very close); an example perhaps of 'varieties... created by several dealers conjointly' (Conder, 1798, [5]). The solution is surely that Spence's and Skidmore's pieces were struck in the same workshop (cf. note to the PAYABLE IN LONDON... edge). It would then be only the ownership of the dies that passed from Spence to Skidmore.

Obv. DD: .BRIGHTON. / an officer standing before a camp.

This appears to find its true reverse in the following die, with which it is recorded in Spence's Addenda (1795A, 354) and Supplement (1795S, 368), and also in Virtuoso 45, 14 December 1795. The pairing with *rev*. L is on the same plate.

Rev. DD: [Siege] HALFPENNY / 'bombs a-throwing into a besieged place' (Spence, 1795A, 354; 1795S, 368).

The links with Spence dies are in B., appendix, D45, London 229, and 250. This is identified by Dalton and Hamer as Spence's *Bastille* die (*obv.* 14 in the handbill). I suspect that this identification was due to Waters, since he remarks (1917, 11) that the handbill is 'of particular interest, as it supplies the correct name of the die called by Conder, Atkins, etc., "Soldiers besieging a city". It . . . shows the Siege of the Bastille'. Dr. Bell (1968, 164) points out that 'the troops are British, the gunners are regulars, and the building is quite unlike the French prison destroyed by the Paris mob'. In fact, it appears to find its true obverse in DD; and in view of the association with *rev.* 14 (J) and the description of the Bastille the morning after its capture, there is no doubt that Spence's *Bastille* die is that with the legend BEFORE THE REVOLUTION (*obv.* K).

Obv. EE: LOUIS.XVI ET.M.ANTOINETTE.ROI ET REINE DE FRANCE + / 17 95 / conjoint busts, right.

This has an early record (B. F6) with only one die used by Spence, rev. T (q.v.), with which it no doubt formed an original pair. In an earlier state without the date it occurs with a die that names Skidmore, so there is little enough reason to think it Spence's.

Rev. EE: [Anchor] IN COMMEMORATION OF THE GLORIOUS FIRST OF JUNE + / 1794 / an anchor and cable. B., London 172, with obv. F. Although this is recorded with both of Spence's sailors, it is unlikely to be Spence's Anchor die, since these are the only Spence dies with which it pairs among a total of thirteen; one of the thirteen (obv. HH) was engraved for Skidmore; obv. NN should be its proper obverse; and there is perhaps some evidence against Spence's ever having used a die celebrating the 'Glorious First of June' (Thompson, 1968, 145). See rev. O.

Obv. FF: [Minerva] TRUTH FOR MY HELM & JUSTICE FOR MY SHIELD + / a helmeted figure holding a shield and a pole topped by a cap of liberty.

B., appendix, London 256 (with obv. V), 264 (with rev. FF; Skidmore edge only). Sheplard referred to this as Spence's (1798, 213, 'Truth'); he could be right, but there is insufficient evidence for the attribution.

Rev. FF: [Liberty cap] LIBERTAS / 1796 / a cap of liberty on a pole radiated.

Its attribution should no doubt be the same as obv. FF (q.v.), with which it possibly forms a true pair.

<sup>&</sup>lt;sup>1</sup> See, however, footnote 4 on p. 153.

Rev. GG: [Lys] 1790 / three fleurs-de-lys.

B., appendix, London 259, with obv. V. An obverse not shown in Table II is a bust right, legend LOUIS REX, JAMES below (DH, Middlesex, 1003); perhaps this is its true obverse.

Obv. GG: HENDON . VALUE . ONE . HALFPENNY / 1794 / a church.

B., appendix, H37, with *rev*. K; Spence (1795), 162 with a die depicting a greyhound and naming B.PRICE, which is no doubt its proper reverse (DH, Middlesex 324; Waters, 1954, 13).

Rev. HH: MAY . DUNMOW . PROSPER. / 1793 / a shield.

B., appendix, London 224, with obv. J; Spence (1795), 100 with obv. JJ, no doubt the proper pair.

Rev. II: CHURCH AND KING / laureate bust, right.

B., appendix, London 193 with obv. O, 262 with obv. M. 'Church and King' was the slogan of hired mobs employed from 1792 to terrorize the English Jacobins (Thompson, 1968, 82; 122; 132; 145; 202).

Obv. HH: [Forge] Manufactory . & . Iron-foundry . Clerkenwell\* / 1795 / two men at a forge. B., London 200, with rev. L. This clearly makes a true pair (DH, Middlesex, 480) with a die reading payable at skidmores furnishing repository \*N° 123 high holborn london. See also FO 12.

#### OTHER LINKED DIES

The remaining dies having one or more links with a certain or likely Spence die may be briefly recorded. There is, to my knowledge, little reason to think that any of them were used by Spence, and particular reason why some should not have been; should evidence be found of the existence of a Spence link in 1795 or 1796, it would elevate the die concerned into the above category of possible Spence dies. They are listed in alphabetical order (obvs. II–WW, revs. JJ–QQ).

Rev. JJ: R. ALLEN. IRONMONGER. POOLE. / . 1797 / the Prince of Wales's crest, an oval below with the figures 75.

This no doubt forms a true pair with one of the dies recorded at DH, Dorset 2-4.

Obv. II: [Anchor] . M . PINTOSH . HORSHAM / 1791 / an anchor and cable.

This appears to find its true reverse in MM, of similar style; Birchall records it only in this pairing (appendix, H41).

Obv. JJ: [Dunmow flitch] PAYABLE . AT . DUNMOW . ESSEX . / a flitch of bacon.

This doubtless finds its true reverse in HH (q.v.).

Obv. KK: GENERAL ELLIOT / bust left.

Its proper reverse is probably a die with the legend BIRMINGHAM HALFPENNY 1792, and the cypher PS[kidmore?] (DH, Warwickshire 224). This token imitates a genuine trade token with a superior bust (ibid. 70).

C 7473 L

Obv. LL: HAGLEY / TOKEN / a man fishing, trees, etc.

All its links are shown in Table II, and it appears to form a true pair with the next.

Rev. KK: A SNAIL MAY PUT HIS HORNS OUT / a snail, tree, and bridge over a river.

The only pairing not in the table is with a stag under a tree (DH, Cambridgeshire 35); of aby, II.

Obv. MM: WILLIAM HALLAN BIRMINGHAM / 1793 / bust left, sprays of leaves beside.

The true reverse is no doubt a teapot, etc., DEALER . IN . GLASS . AND . STAFFORDSHIRE . WARE . (DH, Warwickshire 131).

Rev. LL: [Heath] WEST FRONT OF NEW PUMP ROOM / BATH . / a building, below HEATH . / 1795 / IRON-MONGER . &c. /

This no doubt forms a true pair with Bladud (B., B12; DH, Somerset 40).

Obv. NN: [Howe] MAY THE FRENCH EVER KNOW HOWE TO RULE THE MAIN+ / bust, left. Birchall (H23) records this only with rev. EE, doubtless its true reverse.

Rev. MM: LONG . LIVE . THE . KING . / bust, right.

Cf. obv. II.

Obv. OO: ROBT ORCHARD SAWBRIDGEWORTH / HERTS. / a church, shield above, Jacobs below.

Obv. PP: [Paine] END OF PAIN. / a man hanging on a gibbet, a church in the distance.

This design apparently originated in 1792 with NN (q.v.) as its reverse; Miss Banks was presented with an *End of Pain* on 9 February 1793; in 1792–3 the execution of Paine was frequently threatened and even acted out (Thompson, 1968, 122–3; 133). There are six dies in all (DH, Middlesex 827–36); the reverses recorded in 1795 (Spence, 257–9) are NN, one reading MAY THE KNAVE OF JACOBIN CLUBS NEVER GET A TRICK, and an open book with the words THE WRONGS OF MAN . JANY 21 . 1793.

Rev. NN: PANDORAS BREECHES / a pair of breeches in flames, a serpent with the head of Priestley below. This alludes to an attempt to fire the House of Commons on 9 May 1792 known as the 'Breeches Plot', reported in the Public Advertiser with a skit linking it with Paine, Horne Tooke, and Priestley (Waters, 1906, 42–3). It was apparently the original reverse for obv. PP: 'The End of Pain was originally struck after the fire was discovered under the House of Commons in 1792' (Pye, 1796, 991); there is no evidence that Spence was involved with tokens before 1795.

Obv. QQ: PAYABLE . AT SALISBURY / bust left.

This is recorded in 1795 only with a die bearing HALFPENNY / WGM / 1791, which is of similar style and no doubt provides its original reverse (Spence, 282; DH, Wiltshire 12).

Obv. RR: [Shakespeare] STRATFORD PROMISSORY HALFPENNY / bust left.

B., S16, with the next (DH, Warwickshire 320).

Obv. SS: struck / In honor [sic] and / to perpetuate \_ the memory of / shakespeare / born april 1564 / died april 1616 /

There is no reason to doubt that this was originally the reverse of obv. RR.

Obv. TT: [Shield] HALFPENNY / 17 91 / a shield of arms between laurel branches.

Spence (1795), 394, apparently a true pair, with a die reading PAYABLE AT . T . SANTER KIDDERMINSTER (DH, Worcestershire 23).

Obv. UU: SKIDMORE . 123 . HIGH . HOLBORN / . LONDON . / DEALER . IN . COINS . MEDALS &C / a shield of arms between branches.

Rev. OO: P S CO / DEDICATED TO COLLECTORS OF MEDALS & COINS. /

This is No. 1 of four reverses to Skidmore's churches and gates (DH, Middlesex 536–675).

Obv. VV: a stag right, a tree behind.

Its true reverse may be *Epping Forest* (DH, Essex 1).

Rev. PP: [Tree & shields] A . FRIEND . TO . PEACE . AND . LIBERTY . / a tree, leaning against it two shields with (left) a pole bearing a cap of liberty crossed with a banner, (right) a sword pointing to one arm of a balance, JACOBS below.

Cf. ohv. J.

Rev. QQ: [Keel] COALY . TYNE. / 1797 / a Tyne barge or 'keel', left.

Cf. obv. O, the broken state of which was no doubt the reason for the manufacture of this die to pair with obv. F. Pye (1801, xxxviii. 2) refers to this as a 'counterfeit made for sale'.

Obv. WW: FRANCIS. WHEELER. AYLESBURY. BUCKS. / within a wreath a swan / Fw / 1797 /

This would find its proper reverse in the shield with the legend MAY. THE. TRADE. OF. AYLESBURY. EVER. FLOURISH. (DH, Buckinghamshire 4).

# THE FARTHING DIES

There are also a small number of farthing-size dies to be attributed to Spence. Again there are some dies which name him (*obvs.* 1, 2, *rev.* 2), or have a documented connection with him (*obvs.* 6, 7). The intensive linking between the dies, however, permits one to employ an argument that could not be fully applied to the halfpennies. The first six obverse and reverse dies in Table I are recorded by Dalton and Hamer in every possible pairing except two, i.e. thirty-four out of thirty-six. There is a strong presumption in favour of such a complex of die-linking being due to Spence, and each of the dies being Spence's, and especially where there are few or no external links. This is in fact the case; and seven of them will be found comparable in device with Spence halfpennies. Finally, four (possibly five) associated pairs may be recognized among those twelve dies; and on the grounds of association, and lack of other links, a total of eight obverses and nine reverses may be identified as Spence's. There is insufficient evidence to attribute to Spence any of the remaining linked dies (FO 9–13, FR 10–11).

FO 1: [His Head] T. SPENCE / . A . STATE+PRISONER+IN+1794 . / bust left. [Plate VIII, FO 1 Spence (1795s), 419; B. 36. Cf. obv. B.

FR 1: [Britannia] + ROUSE BRITANNIA! +++ / Britannia, right. [Plate VIII, FR 1 Spence (1795s), 369; B. 37. Cf. rev. E.

FR 2: [Pig] PIGS MEAT PUBLISHED BY T SPENCE LONDON- / a pig, left, etc. [Plate VIII, FR 2 Spence (1795), 270. Cf. obv. C.

TABLE I

Spence Farthing Dies and their Links

# [Reverses]

	1	2	3	4	5	6	7	8	9	10	H	Obv.
Obverses	Brit'nia	Pig	Bull-ass	Slave	Geo3/ass	Padlock	Cat	Pitt	Sailor	Pandora	Druid	mules
<ol> <li>His head</li> </ol>	Mx 1077	Mx 1081	Mx 1078	Mx 1082	Mx 1079	Mx 1080						
2. 3 Thomas	Mx 1113	Mx 1117	Mx 1112	Mx 1118	Mx 1115	Mx 1116	Mx 1114					a
<ol><li>Adam and Eve</li></ol>	Mx 1084	Mx 1088c	Mx 1085	Mx 1089	Mx 1086	Mx 1087	l					.,
4. Keel	Nb 30	Nb 32	Nb 29	Nb 34	Nb 31				Nb 28			b
<ol><li>Even fellows</li></ol>	Mx 1092	Mx 1096	Mx 1093	Mx 1097	Mx 1094	Mx 1095		Mx 1098				
<ol><li>All fours</li></ol>	Mx 1099		Mx 1100	Mx 1104	Mx 1101	Mx 1102				Mx 1103	An 460	b
7. Pigs' Meat							Mx 1091	.,				
8. Tyrants						• •		Mx 1111				• •
9. Anchor	Mx 1090							.,	Nb 35			
10. Paine								Mx 1109		Mx 1[10	An 459	
<ol><li>3 Hanging</li></ol>	. ,				Mx 1120					Mx 1121		a
12. PMCo.								An 467		An 464	An 452	
<ol><li>Hibernia</li></ol>								Db 408		Db 405	An 458	

a Mx 1119.

<sup>&</sup>lt;sup>b</sup> Nb 33.

<sup>&</sup>lt;sup>c</sup> Obv. 3 also occurs in an earlier state with rev. 2, which shows c. James . F. in the exergue, etc. (Mx 1083). Abbreviations are the same as for Table II, with the addition of Db for DH, Dublin.

FO 2: [Three Thomas's] THO\$ SPENCE / SIR THO\$ MORE / THO\$ PAINE / 1795 / ADVOCATES FOR THE RIGHTS OF MAN - / [Plate VIII, FO 2

Spence (1795), 57 and 236 giving the legend and headed 'Three Thomas's'. Cf. rev. B, FO 11.

FO 3: [Adam & Eve] MAN OVER MAN HE MADE NOT LORD / two half-naked figures, erasure lines in the exergue. [Plate VIII, FO 3

Spence (1795), 58. The words are those of Milton 'and reason' (Spence, 1803, 20; also quoted in *Pigs' Meat*, ii. 204). Modern editions of *Paradise Lost* (xii. 69–70) in fact read 'man over men . . .'. The device is perhaps a memory of John Ball's preaching in the Peasants' Revolt.

FR 3: [Bull-Ass] AM I NOT THINE ASS. / 'Bull turned Jackass . . . A bull having an asses head, bearing a King' (Spence, 1795, 57). [Plate VIII, FR 3<sup>1</sup>

The words are those of Balaam's Ass (Numbers, 22: 30), beaten by its master until the dumb beast spoke. Spence refers to the source in his Letter from Ralph Hodge to his cousin Thomas Bull (1795?), in which he also has some questions 'for poor Johnny Bull Who is now so dull', become in fact 'the poor dull ass the public'. John Bull appeared in many of the prints of 1795, crushed beneath a royal burden of taxation (George, 1959b, 14).

FO 4: [Keel] \*\*COALY\*TYNE\*\* / 1796 / a Tyne barge or 'keel', left. [Plate VIII, FO 4 Conder (1798), Northumberland 5. Cf. FR 9, obv. O.

FR 4: [Slave] AM . 1 . NOT . A . MAN . AND . A . BROTHER / 'Negro in chains, in a supplicating posture' (Spence, 1795, 235), JAMES below. [Plate VIII, FR 4]

A very similar design appears on a halfpenny (DH, Middlesex 1037–9), one obverse die of which, clasped hands with the legend MAY SLAVERY & OPPRESSION CEASE THROUGH-OUT THE WORLD, interestingly occurs also with the London Corresponding Society die (DH, Middlesex 289). I am not aware that sympathy with the anti-slavery cause is to be found in Spence's writings.

FO 5: + . EVEN FELLOWS . + / the heads of the Devil and Pitt back to back. [Plate VIII, FO 5 B., appendix 47. Cf. rev. K, obv. L.

FR 5: [George III/Ass] ODDFELLOWS / \*A GUINEA PIG A MILLION HOG. / the heads of an ass and George III back to back. [Plate VIII, FR 5]

B. 40. Cf. rev. K.

FO 6: [Man on all fours] IF THE LAW REQUIRES IT WE WILL WALK / THUS / a man walking right on feet and hands. [Plate VIII, FO 6

Conder (1798), Not local, farthing 19. There is a print with a similar design and the same legend, called *The Civil Citizen*, signed by W. Spence and published by T. Spence, 1796 (copy bound at beginning of volume ii in the British Museum set of *Pigs' Meat*.)

FR 6: [Padlock] +MUM+ / 17 96 / a padlock. [Plate VIII, FR 6 B., appendix 53. Cf. rev. W.

<sup>1</sup> Through an oversight, a specimen was selected for illustration on which the king has lost his leg and spur.

FO 7: [Pigs' Meat] +IF LORDS ALL MANKIND ARE++ / THEN THEY YE RENTS SHOU'D SHARE / 'a hand referring to the political Bible', PIGS / MEAT / [Plate VIII, FO 7]

The description is from Spence (1795), 67. The legend occurs in Pigs' Meat, iii, 192.

FR 7: [Cat] IN . SOCIETY . LIVE . FREE . LIKE . ME / 17:—95 / a cat left, JAMES below. [Plate VIII, FR 7 Spence records this only with FO 7 (1795, 67), with which, therefore, it forms a true pair—they both had a raised centre (depressed on the coins). Cf. revs. R, S.

FO 8: [Tyrants] SUCH. IS. THE. REWARD. OF /. TYRANTS. / 1796 / [Plate VIII, FO 8 Conder (1798), Not local, farthing 74. This must belong with the next die.

FR 8: [Pitt] END . OF P[eye]T . / a man hanging.

[Plate VIII, FR 8

Conder (1798), Not local, farthing 74. The rebus was put to political use in the later eighteenth century particularly (George, 1959a, 8); the same use of the device appears on a medallic token of the London Corresponding Society (DH, Middlesex 290). Cf. the earlier *End of Pain*[e] (*obv.* PP).

FR 9: [Sailor] NEWCASTLE / FARTHING / a sailor, right.

[Plate VIII, FR 9

Virtuoso 172, 28 January 1797. Cf. obv. F for a similar figure, and FO 4 for its probable true obverse.

FO 9: [Anchor] PROMISSORY NAVAL FARTHING \* / an anchor and cable.

This links further with a whole board of admirals (DH, Hampshire 98, 100, 107, 110, 113).

FO 10: [Paine] END OF PAIN / a man hanging on a gibbet, a church in the distance.

Cf. obv. PP, the three early reverses of which are paralleled in the farthing size.

FR 10: PANDORAS BREECHES / a pair of breeches in flames, a serpent with the head of Priestley below. Cf. rev. NN.

FO 11: [Three hanging] THE. THREE. THOMAS'S / 1796 / three men hanging.

This is not Spence's *Three Thomas's* die, for he catalogues it paired with four of his dies (1795, 57; 236; 270; 1795s, 369), none of which occurs with FO 11; the halfpenny-size version (cf. rev. B) does not even link with any certain or likely Spence die. As their dates show, these are later satires on Spence's dies with the names in three lines (FO 2, rev. B); both occur with a *Wrongs of Man* die, and the farthing also with *Pandora's Breeches* and MAY THE 3 KNAVES OF JACOBIN CLUBS NEVER GET A TRICK (DH, Middlesex 1121–3).

FR 11: a Druid's head between oak branches.

Cf. obv. Z. Its Spence link is extremely rare, its proper link with the next die fairly common.

FO 12: P M CO / THE ANGLESEY MINES FARTHING. / 1788 /

Cf. FR 11. Reverses not shown in the table include the centre of *obv*. HH (DH, Anglesey 469).

FO 13: HIBERNIA. / a female figure, left, holding a harp.

Both this and the previous die are recorded with FR 8 in Virtuoso 153, dated 7 December 1796. If they are indeed not Spence's, he might have sold out to Skidmore by this date.

# MEDALS OR CURRENCY?

As early as 1796 the majority of Spence's tokens were classified rather nebulously as 'political pieces'. One cannot help suspecting that this heading was devised in order to put them out of sight and mind in 'a cell or two in a miscellaneous drawer for such *lusae monetae*' (Civis, 1797, 32), 'that collectors may not be led on, and feel themselves obliged to purchase every thing that is described or represented in the publications of the day' (R. Y., 1796, 754). It is worth considering whether they functioned as medals or as currency.

Perhaps it is natural to assume, if their devices were their most important feature, that they were medals (or medalets), and so they have been described. There is little or no contemporary evidence to support this, however. Spence used the term 'medal' in 1814, but the word need not mean anything more than a coin no longer current, neither is the use of the word after the suppression of the tokens really significant.

On the other hand, in 1795 he describes them among the 'provincial, political and other . . . coins', and they are 'coins' in his handbill. He used as a common reverse the 'Little Turnstile halfpenny', and there is a 'Newcastle farthing'. Some of his dies ostensibly identify provincial tokens, and two are actually called a token. He therefore intended his pieces to be accepted as token coins—and of this he has succeeded in persuading most writers. Indeed, Sheplard charged him (1798, 122) with having done more harm than any other persons in the aggregate to the 'coinage'.

It is the received opinion, despite their devices, that Spence produced them as tokens in order to impose upon collectors' purses. This may well be true in part, especially in his last year of token manufacturing: some of his dies appear to be merely curious, and one is explicitly 'inscribed to collectors of medals'. No doubt he was not averse to augmenting his income by the sale of pieces made cheaply for the purpose. However, the characteristics of such pieces would be rarity and high price. On the first, at least ninety-seven of his pieces recorded in Dalton and Hamer are described as common or 'fairly common', and the following comparison of pieces struck from Spence dies which occur both with Spence edges and with an edge naming Skidmore would, if the latter were struck by Skidmore, suggest a different aim from his.

	Spence	Skidmore
E/B	Rare	Rare
E/I	Fairly common	[DH Addenda]
I/G	Scarce	Fairly common
P/F	Fairly common	Very rare
P/G	Scarce	Very rare
P/L	Scarce	Very rare
X/O	Fairly common	Scarce

On the second characteristic, it struck R. Y. (1797, 269) that Spence's tokens were selling at very great prices, but this merely begs the question of how highly he valued them; in fact he could see 'neither design nor execution that can recommend the greater part of the political jettons' (ibid.), which were 'the very ditch' of a 'dirty traffick' (1796, 754). The prices Miss Banks was charged for tokens (MS.) offer no support for a belief that those Spence sold were more expensive than others, or even as expensive; that indeed, until a general rise in June 1795 from about 1d. to 6d. each, they could be described as

anything but cheap: on 9 April 1795 she paid Mr. Spence 1s. 6d. for twenty halfpence and eight farthings; on the 10th Mr. Skidmore 6d. for six tokens, Mr. Spence 1s. 6d. for twenty-four tokens; on the 11th Mr. Spence 1s. for sixteen tokens, on the 14th 6d. for eighteen farthings, and so on; whereas on 7 May she was charged 5s. by Hammond, another dealer, for the End of Pain | Pandora, and the same price two days later by Skidmore for the End of Pain | Wrongs of Man.

There is therefore no question that Spence's tokens were bought by collectors, but no proof that profit was his primary aim. Had they been merely curios for collectors he would hardly have 'frequently distributed [them] by jerking them from his window amongst the passengers [i.e. passers-by]' (Mackenzie, 1827, i. 401). The pseudonymous R. Y. divined Spence's real purpose (1797, 269): 'It is not long since I called at Spence's shop, and saw many many thousands of different tokens lying in heaps¹. . . . These, therefore, could not be considered as struck for a limited sale. I confess, considering the number I saw struck, and what the subjects of them were, I thought myself justified in supposing that it was the intention to circulate them very widely'; to circulate them, that is, as propaganda for his Plan.

Mention has already been made of Spence's penny weekly *Pigs' Meat*, addressed to 'the labouring part of mankind'. 'He certainly believed', E. P. Thompson has written (1968, 177), 'in the methods of the underground—the secret press, the anonymous handbill, the charcoaled pavement, the tavern club . . .'. It was believed that Spenceans were at the bottom of bread riots in 1800 and 1801 (ibid. 543); Lord Sidmouth at the Home Office was alarmed in 1812 at an outbreak of improper chalked inscriptions such as 'Spence's Plan and full bellies' (H.O. 65. 1 and 2, cited Rudkin, 1927, 141); 'we have all seen', wrote Cobbett in his *Weekly Political Register* of 14 December 1816, 'for years past, written on the walls in and near London, these words, "Spence's Plan" '. 'More important, in the context of repression', E. P. Thompson continues, 'Spence did not believe in a centralized, disciplined underground. His policy was that of the *diffusion* of agitation'. To these media of diffusion we thus add his tokens; but how were they to circulate his propaganda?

It is possible, in view of these activities, the cheapness of his tokens even to collectors, and his countermarking of the currency, that Spence intended his tokens to circulate in the currency; if so, their denominations would have made them of most use to those 'laborious poor' on whose behalf the Commons addressed the King on 3 March 1797 concerning the state of the copper currency.<sup>2</sup> One and possibly a second 'true' pair of his dies mimics the regal coinage like an evasive halfpenny<sup>3</sup> (there is also a comparable pair of farthing dies). Until the collecting mania of c. 1795<sup>4</sup> the deficiencies of the currency provided the whole cause and occasion for the fabrication of coin-like pieces.

- <sup>1</sup> I know of no better evidence for the quantities struck by Spence. Dalton and Hamer give no indication of the numbers involved in their degrees of rarity. The dies here identified as certainly or likely to be Spence's together struck at least 420 different pieces (including edge varieties), nearly a quarter of them described as common.
- 2 That one needs to explain his designs does not mean that they would have required explanation at the time, when people were more generally literate than is sometimes thought, and in London accustomed

by prints to the physiognomy of their rulers and the use of visual propaganda.

- <sup>3</sup> i.e. a forgery resembling the regal coinage in type, but varying in legend in order to evade the penalties of the 1742 Act against counterfeiting. See Barnard (1926).
- <sup>4</sup> Sheplard (1798, 120) dates the 'most prevalent and regular' enthusiasm to the latter part of 1794, but proceeds to date Hammond's first list to this same period, Cf. footnote 2 on p. 127.

There is evidence from Scotland that political pieces did reach the 'lower classes' (whether as currency or medals is not clear): 'medals' with inscriptions expressive of liberty and equality had been forwarded in anonymous letters, and in 1792 were in circulation among the commonalty (Meikle, 1912, 95); while in July 1796 Alexander Leslie, an Edinburgh bookseller, wrote to the London Corresponding Society offering to act as their representative: he would be pleased to receive any of their publications, more especially 'medals like half-pence', for which there was a demand (Place, MSS. 27815, 74, cited Meikle, 1912, 185). Finally, a spy drew Pitt's attention to the political implications of the tokens: 'The Presbyterian tradesmen receive them in payment for goods, by which intercourse they have frequent opportunities to corrupt the principles of that description of men by infusing into their minds the pernicious tenets of Paine's Rights of Man.'1

However, I know of no direct evidence for the currency of Spence's tokens in particular; possibly they were of too high relief and too 'curious' ever to be passed on. Those I have seen show few signs of wear—although they would in any case have been ousted from circulation by the new Soho coinage of pennies and twopences (proclaimed 26 July 1797), halfpennies and farthings (1799). As far as the considerable contemporary documentation goes—though, deriving from articulate connoisseurs, it is of little significance to the question of diffusion among the working class—Spence's tokens were bought up as curiosities, as indeed Evans complained had happened to his publications (1821, 4, 'to keep them out of the hands of the poor'; see also Rudkin, 1927, 138). The only suggestions of any alternative outlet at the time are made by Mackenzie in the passage already quoted, and by Davenport with his account (1836, 4) of Spence 'striking his copper medals, and circulating them amongst his friends and customers'.

# PROPAGANDA

Nevertheless, they cannot be considered ineffective as propaganda. That Spence was not prosecuted on this account is not significant, for visual propaganda had developed almost an immunity in England; yet the prints were not without political effect. I have shown that Spence's *Three Thomas's* die was parodied with three men hanging, in the same way that political prints evoked their counter-prints; in one rare case (farthing obv. 2/obv. 11) it was indeed muled with Spence's die, as were the *End of Pain* dies, etc., and there appears to have developed quite a war of token issuers. One wonders if Archenholtz, author of the *Tableau de l'Angleterre* (1788), would ten years later have

- <sup>1</sup> Quoted (without date or source) by J. Bronowski and B. Mazlish, *The Western Intellectual Tradition* (1963), 372.
- <sup>2</sup> See, though, Seaby's Coin and Medal Bulletin, No. 553, June 1964, 229. I have not investigated the Privy Council, Home Office, or Treasury Solicitor's papers in the Public Record Office.
- John Elder and William Stewart were charged on 10 January 1793 with publishing and distributing a seditious writing and two seditious medals, reading respectively 'Liberty, equality, and an end to impress warrants/The nation is essentially the source of all sovereignty' and 'Liberty of conscience, equal repre-
- sentation, and just taxation/For a nation to be free, it is sufficient that it wills it'. This was a crime 'by the laws of this, and of every other well governed realm'. Howell (1817), 25–34; I owe this reference to Meikle (1912).
- <sup>4</sup> A most interesting specimen of this in the British Museum has been overstruck by the dies FO5/FR8, which almost certainly provides another case in which a Spence die was muled with another while he was still producing tokens, and strongly suggests that these varieties, far from being created conjointly, were manufactured so much without Spence's consent that he attempted to obliterate one of the resulting pieces.

distinguished Britain and Holland thus: 'The Frenchman puts it into song, the ponderous Dutchman strikes medals, whereas the Englishman has chosen engravings as the most suitable medium for satire' (original quoted George, 1935, xvi–xvii).

Furthermore, the collectors themselves provide evidence of the diffusion of Spence's propaganda. A few of his tokens are recorded by Birchall (1796) in the hands of M. Kanmacker, London, and Thomas Thompson of Evesham; he himself was from Leeds, Conder from Ipswich, and R. Y. from 'the neighbourhood of a very populous manufacturing town'. (As collectors, they need not of course have obtained them from currency; R. Y. actually reported a visit to Spence's shop, and the imprints of the catalogues of Birchall and Conder (1798) show connections with London.) If the purpose of propaganda is to annoy, to compel unwilling attention rather than to persuade, Spence's tokens certainly had an effect on them. For R. Y. (1796, 753) they were doubtless among 'the clumsy and paltry productions which are hourly issuing from every dirty alley in London or Birmingham, for the purposes of imposition; in some instances for purposes of a more serious and premeditated ill-tendency'. Civis suggested (1797, 32) that indignation should not be wasted on 'the trifling political jettons of Spence and others . . . such can produce no effect more important than that of licentious caricatures, which excite laughter, or incur contempt. The less serious attention to this rude species of wit, so much the better . . . The enlightened medallist is of no party.' 'With Civis', R. Y. replied (1797, 269), 'I can value merit in whatever shape it may appear; and it is not because a jetton proceeds from the shop of one of the three Thomas's that I would reject it, but because, having no merit in the execution, I see no good, but many bad purposes answered by encouraging its circulation.'

For Sheplard (1798, 121–2), 'Skidmore of Holborn was one of the most reprehensible dealers', yet 'has some claim to our pardon, on account of his beautiful series of the London churches'; consequently 'he does not deserve so much censure as Spence . . . This man could impugn the conduct of administration, and plead as an advocate for public justice, and yet had not private honesty to recommend himself. . . . The designs of many of his pieces were contemptible and illiberal in the extreme . . . they have not either taste or beautiful execution to recommend them, but are struck in a very careless and awkward manner upon the most corrupt copper.' They are 'barbarous jettons' (ibid. 743); 'his personal head is scarcely more valuable than the coin that bears its resemblance' (ibid. 213); and to complete this invective we have the distasteful spectacle of smug satisfaction at another's misfortune: 'Spence experienced the punishment of his dishonesty, and became a bankrupt' (ibid. 122).

Spence's propaganda has continued to have an effect: Sharp (1834, vii) referred to his 'abominable trash . . . bearing . . . mischievous and inflammatory devices'; and even Atkins and Dalton and Hamer felt themselves compelled to describe the head or figure on obv. J, rev. K, FO 5, FR 3, 5, and 8 as that of 'a man'.

# COUNTERMARKING

If further evidence is required of Spence's propagandist intent, it may be found in his venture into countermarking the currency: 'during his latter days, he was zealously employed in disseminating a knowledge of his Plan. With this view, he stamped the current coin with the words "Spence's Plan", and his disciples chalked them on every

wall in London' (Place, MSS., 229°, information written by one of his correspondents on the back of an envelope, presumably Evans's son T. J. Evans, to whom it is addressed). Such an attempt to use the currency (frequently, if not always, employed for state propaganda) for propaganda against the constitution, at least as then established in a parliament of landlords, must be, to say the least, unusual.

Compared with his tokens, there is much less documentary evidence of this activity, for which there may be a very good reason. If Spence was indeed chagrined at the extent to which his tokens were bought up as curiosities, the stamping of the actual currency would have recommended itself to him both as a more effective means of circulating his propaganda, and as a way to avoid the collectors, who were not likely to take an interest in damaged pieces—and, indeed, it was three-quarters of a century before they were recorded. Countermarking might also, of course, have appealed to him as less expensive, but it would still have been necessary for him to acquire the stamps and the blank discs on which some of the countermarks appear.

He would seem to have adopted this expedient after selling his dies. 'He had after',2 Place recorded (MSS., 184), 'blanks rudely cut out, not quite so large nor so thick as a halfpenny, on which he struck words with punches.' They also occur on English, Irish, and Scottish copper coins from Charles II to George III.3 Waters concluded (1906, 50) that they had mainly been applied before 1787 because 'there were but one or two specimens upon any coins of a later date'. In fact the circulation of those coins, with the tokens and the evasions, was challenged only by the issue of Boulton's halfpence and farthings in 1799; and Spence's countermarks do occur on an evasion (Batty, 1878, 4667) which dates from 1796/7 (Kent, 1957, 8-9), and on the 'cartwheel' pennies of 1797 (two examples with the same stamps seen, one of them in the British Museum). The probability is, therefore, that he began countermarking c. 1797; a suggestive precursor may be found in the distribution, at a meeting of 'the lowest class of the people' held by the London Corresponding Society on 29 June 1795, of biscuits embossed 'Freedom and plenty or slavery and want' (George, 1942, 8664). How long he continued I cannot tell (the countermarked cartwheel in the British Museum looks fairly worn); but the regular 1799 and 1806-7 coinages would not have left him much scope for circulating the old regal copper or his own blanks.

Waters had once had about three hundred of Spence's countermarked pieces (1906, 50). Batty (1878)<sup>4</sup> and Waters (1906, 50–2) list the different combinations of slogans, of which the following are representative: Read Spence's Plan, you fools, Spence's Plan is small farms & every blessing, small farms fat bairns, fat bairns full bellies, plenty for ever in small farms, peace and plenty, peace for ever, peace and liberty for ever, war is starvation, landlords and starvation, no starvation in peace, Spence's Plan no landlords, no parochial starvation, partnership in land and every blessing, partnership in land the land is ours, in land is liberty, in land is peace, land and no landlords, no landlords,

the passages from the Place collection.

<sup>&</sup>lt;sup>1</sup> Cf. Mr. Dolley's remarks on another episode (1965, 184): 'It may be thought . . . that the countermarker was extraordinarily perceptive of economic trends outside his faction's control in choosing coinage as the medium of his protest.'

<sup>&</sup>lt;sup>2</sup> The word is interpolated and not very clear. I am grateful to the Keeper of Manuscripts for confirming this reading, and for giving me permission to publish

<sup>&</sup>lt;sup>3</sup> Also on sixpences. D. F. Allen, 'Political Tokens of the 18th Century', read before the British Numismatic Society in Mar. 1937. See Addendum 4.

<sup>&</sup>lt;sup>4</sup> Halfpennies 4323–46, 4348, 4350–1, 4360–3, 4365–8, 4385–89A, 4515–25A, 4526B–42B, 4553–60, 4569–71, 4667, 4738–45, 4755–4838, 4841–56, 4942–64, 5070–87, 5104–27.

you rogues, no landlords or war, war or Spence's Plan, war or land, no no landlords . . . To set this in some sort of context, it may be noted that in 1796, while Britain was at war with France, a Gosport bookbinder was sentenced to the pillory and five years' hard labour for saying 'No George, no war' (Thompson, 1968, 192–3).

As will be realized from the repetition of words and phrases, it is possible to work out from the lists of slogans alone what the separate punches were (they are not distinguished by Batty or Waters). I have, however, confirmed the majority from the collections of the British Museum (which unfortunately has only six such pieces), and Messrs. R. N. P. Hawkins and C. Brunel, to all of whom I am very grateful; those that I have not confirmed are asterisked. Various other marks—a horse, a star, pairs of initials, etc.—occur with Spence's countermarks, but as their Spencean significance (if any) escapes me, I do not list them; it is intriguing, nevertheless, that two pieces reading 'Spence's Plan' on one side had cottages engraved on the other (Batty, 1878, 4758; 4765). It is interesting also that Mr. Hawkins has a piece holed for suspension in such a position that 'Spence's Plan / peace' would be exhibited upright. The twenty-seven letter stamps are set out below.

& AND BLESSING EVERY FAT BAIRNS FOR EVER FULL BELLIES IN IS LAND LANDLORDS \*LIBERTY NO OR OURS PAROCHIAL PARTNERSHIP PEACE PLENTY \*READ SMALL FARMS SPENCE'S PLAN STARVATION THE WAR YOU FOOLS YOU ROGUES

# MULING

The earliest use of the word 'mule' recorded in the Oxford English Dictionary in the sense of a coin presenting two obverse types, or two reverse types, or types which do not correspond, is dated 1884. The word does, however, occur earlier: Sharp (1834, 126;

183) has a heading 'Mules, or coins impressed with the obverse and reverse of genuine dies [sic]'; and Pye uses it in a way (1801, 3) that immediately suggests a neologism: 'the endless varieties (not unaptly termed mules) produced by a combination of dies not originally intended for the same coin'. In fact, it appears to have been coined five or six years before. The satirical 'token collector's halfpenny' of 1796 (DH, Middlesex 298-9) depicts an old man putting a fool's cap on the head of a seated connoisseur, and on one reverse asses running for halfpence, while the other, with the edge any sum GIVEN FOR SCARCE ORIGINAL IMPRESSIONS, bears an ass saluting a mule with the words BE ASSURED FRIEND MULE YOU NEVER SHALL WANT MY PROTECTION. Referring to this piece, Sharp (1834, iv) says that 'the very appropriate term "Mule" was ever after applied to these illegitimate varieties'; but the term can hardly have originated with this piece, since the numismatic sense clearly derives not directly from the animal but from the concept of a hybrid. If that sense already existed, the piece was a satire of considerable wit; if not, there would have been no reason to depict a mule. Evidently, therefore, the term was in existence in 1796; whereas it was not at any rate in general use in 1795: 'some persons . . . by striking the reverse of one die with the obverse of another, and vice versa . . . have produced a great number of different coins, which are vulgarly called "Bastards" '.1

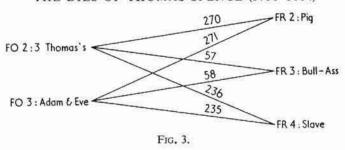
There is usually a reason for the creation of a new term. What was perhaps new in 1795 (not mules themselves of course), or at least a novelty to collectors, was the deliberate creation of varieties by muling. This finds documentary support: Pye had ceased to take an interest in the tokens (in 1795) once 'obverses and reverses [were] mixed on purpose to make variety' (1796, 991); R. Y. gave a warning (1797, 268) that 'dies were inter-changed and crossed into others'; Sheplard recalled (1798, 121-2) that 'the drawers of the dealers and the cabinets of the curious were immediately inundated with coins of an heterogeneous nature: coins whose obverses and reverses had no relation to each other . . . This interchanging of the dies and multiplication of the coins almost totally changed the nature of the pursuit.' The Gentleman's Magazine of 1796-8 demonstrates that Spence was of great concern to collectors; his handbill advertises his willingness to create mules; Skidmore's dies may have been more extensively muled, but Spence's dies were certainly more intensively muled than any others and his muling therefore the most conspicuous: 'Skidmore of Holborn was one of the most reprehensible dealers that practised this imposition; but . . . Spence . . . His dies were numerous; and they were inter-changed almost beyond the powers of calculation' (Sheplard, 1798, 121-2). There is justification for suggesting, therefore, that Spence's productions were very much in the mind of whoever first used the word 'mule' numismatically.

To know whether he did in fact originate intentional muling, even in the seventeennineties, requires a great deal more investigation of die-linking in the tokens; but he must have a strong claim. Failing such documentary evidence of intent as Spence's handbill, the question will be determined by the extent and complexity of die-linking; and the only cases recorded in the main part of Spence's catalogue (1795) in which a die even pairs with more than two others<sup>2</sup> appear to be the following cross-links.

gression of dies) can readily be accepted as replacement dies; however, Spence (1795), 187, 189 = DH, Westmorland 5 and ?4, by Lutwyche of Birmingham, look rather like intentionally created varieties.

<sup>&</sup>lt;sup>1</sup> J. Hammond, *The Virtuoso's Guide in Collecting Provincial Copper Coins*, 1795, quoted by Dalton and Hamer, pp. [3–4].

<sup>2</sup> A second reverse (and any straightforward pro-



Again it is commonly believed that mules were all produced for the purposes of sale, 'stimulated by the hopes of gain'.¹ It has to be conceded that financial considerations cannot be entirely ruled out for Spence—though is it possible that such a die as *Dudley Castle* or the *Highlander* might have been employed to insinuate into the hands of connoisseurs a coin with a political device on the other side? An examination of the diagram above of Spence's first inter-linking of dies, however, will reveal that all the pairings make sense: 'Am I not a man and a brother?' and 'Am I not thine ass?' with their solutions 'Man over man He made not lord', and 'Advocates for the rights of man'; and 'Pigs' Meat' where the solutions may be found. Further, he used for his countermarking the same technique of combining and recombining a limited number of elements to make kaleidoscopic patterns of meaning. Perhaps it was suggested by his early attention to the letters of the alphabet.

Spence's initial motive in muling, I suggest, was to express an imaginative interplay of meaning, to create grotesques in Ruskin's sense of 'the expression, in a moment, by a series of symbols thrown together in bold and fearless connection, of truths which it would have taken a long time to express in any verbal way, and of which the connection is left for the beholder to work out for himself'. There are sufficient grounds, among the dies which he listed in the handbill, to support the contention that this continued to be his primary aim;2 and two examples of such worked-out connections may be given. Professor Mathias (1962, 34) has seen Spence's Deserted Village combined with the Shepherd 'surveying a vast tract of country empty of other cultivators' (G/F) as suggesting the Tudor story of enclosures for pasture making the sheep 'eat up men'. Finally, much of what Dr. George has called the most inflammatory of the prints (1959b, 20; 1942, 8365), by 'Citizen' Lee whose emphasis like Spence's was upon parochial and village associations, but who unlike Spence found it necessary to flee to America (Thompson, 1968, 155; 197), is to be found (especially if obv. T represents George III) in a more subtle fashion in the links of rev. T, the Guillotine. Truly the revolutionary republicans were enterprising in their propaganda.

# CONCLUSION

Apart from one isolated medal, I have attributed to Spence forty-three halfpennysize dies and seventeen of the farthing size; identified eleven halfpenny dies as likely to be his, of which one on the analogy of a farthing would not have been; described another

<sup>&</sup>lt;sup>1</sup> Hammond, 1795 (whose first catalogue had been eclipsed by Spence's), quoted by Dalton and Hamer, <sup>2</sup> See Addendum 5.

thirty-six halfpenny and seven farthing dies linked with them, none of which—if, as seems likely, Campbell's, Pidcock's, and Skidmore's tokens were struck in the same workshop as Spence's—need be his. There is no reason to consider the satirical FRENCH LIBERTY / ENGLISH SLAVERY or Three Men Hanging to be Spence's, as Dalton and Hamer have done. A disputed handbill lists Spence's dies and must have been published by him. The identification of Spence's Bastille die has been corrected, and a die that Dalton and Hamer included without seeing explained away. In addition to dies illustrating points in his Plan, I have connected Spence with designs representing a guillotine, Lord George Gordon, the United Englishmen and Irishmen, and anti-slavery. I have argued that his pieces were not medals but propagandist tokens, and have made out a case (not proven) that they were intended to circulate his propaganda not among the curious but among the working class, in the same way as his countermarking. Finally, I have found Spence making secular use of 'millennium' a quarter of a century earlier than the first record in O.E.D.; and have traced the word 'mule' in its numismatic sense (O.E.D. 1884) back to 1796, suggesting that numismatists owe it to the 'grotesque' Jacobin propaganda of Thomas Spence.

# SOURCES

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# NOTES ON TABLE II

- a. Die-pairings that occur are recorded according to their catalogue number in Dalton and Hamer, ignoring the fact that they use the number to describe an edge also. The counties are abbreviated thus: An-Anglesey, Bk-Buckinghamshire, Do-Dorset, Ex-Essex, Ha-Hampshire, Ht-Hertfordshire, Lt-Lothian, Mx-Middlesex, Nb-Northumberland, So-Somerset, Sx-Sussex, Wa-Warwickshire, Wi-Wiltshire, Wo-Worcestershire.
  - b. Atkins adds the pair L/E (1892, Mx 623 bis).
- c. Batty (1870-1) would add the following: W/PP (914), X/C (1276), and the reverse mules C/J (1266c), C/W (1277a), C/Y (1271), and C/KK (1274). His cataloguing does not, however, inspire confidence in his die identities.
- d. For the following Dalton and Hamer rely on Atkins (1892) and 'notes that have been supplied by various collectors': C/D, E/K, K/Y, O/II, EE/OO, the obverse mules EE/HH, HH/KK, HH/TT, NN/QQ, and the reverse mules B/P, C/D, D/P, F/H, F/P, K/W, L/Y, L/NN.
- e. Rev. F also occurs in an earlier stage with the date clear, paired with obvs. B (DH, Addenda, Mx 690 bis) and H (Wo 7). There is no information on the point in the catalogues for the coin WW/F. which is not in the British Museum nor, as I am grateful to the Curator for telling me, in the Buckinghamshire County Museum.
  - f. L/L also occurs with the addition of dotted borders (Mx 805).
- g. Obv. N with rev. OO and obv. FF is in a later state with legend RT HONORABLE C.J.FOX. and date 1797.
  - h. Q/NN also occurs on a penny-size blank (Mx 34).
  - i. Obv. W with rev. X is in an earlier state lacking the legend.
  - j. Obv. EE with rev. OO (etc.) is in an earlier state lacking the date.
  - k. DH Ex 28 is described just as 'R: Odd Fellow'; it might, therefore, be either JJ/K or an obverse mule L/JJ.

C 7473

- I. Atkins confirms that it is with rev. C that obv. SS pairs (1892, Wa 246).
- m. Dalton and Hamer have insufficiently distinguished the two cat dies (revs. R and S), and I have been unable to establish which die it is (though probably S as by far the commoner) that pairs with obv. JJ (Ex. 27; the piece is neither in the British Museum nor, as I am grateful to the Borough Librarian and Curator for informing me, in the Chelmsford and Essex Museum), obv. NN (Atkins, 1892, Not local 119, appears to confirm that it is S), and forms a reverse mule with W (Mx 759 bis).

# ADDENDA

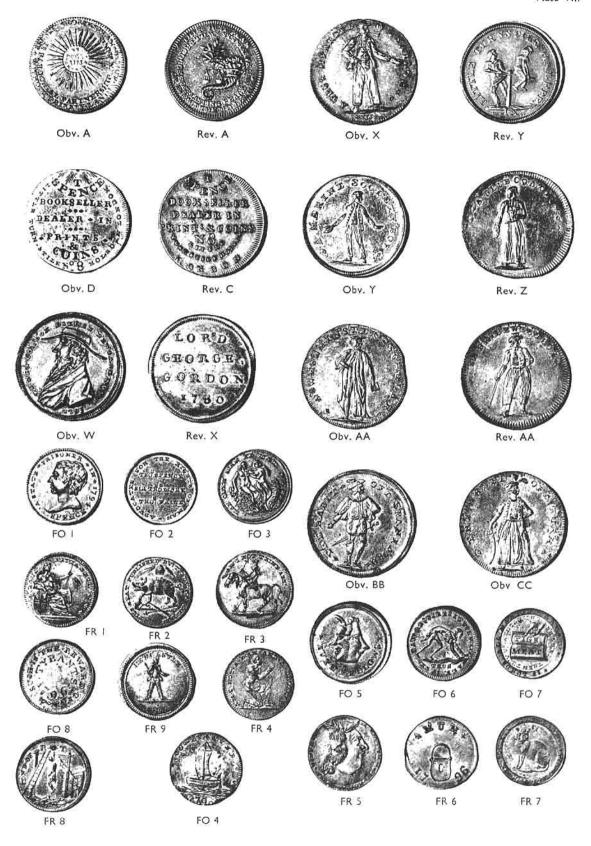
- 1. Though everything points to the production of Spence's tokens at Skidmore's 'manufactory & iron-foundry' in Clerkenwell, an investigation of the links which do not involve a Spence die has revealed that rev. LL belongs to a distinct group which includes dies naming as manufacturer both Kempson and Lutwyche of Birmingham. One begins to feel that all the eighteenth-century tokens are die-linked!
- 2. Rev. L: H. A. Grueber identified the hand and heart on this die as a sign of a Fleet marriage (Numismatic Chronicle, 3rd series, 11, 1891, 97). It originated with obv. L, which would after all, therefore, point to a similarly surreptitious union beneath the superficial opposition, the two forming another associated pair.
  - Rev. Q: I find that Mendoza defeated Richard Humphries in Doncaster on 29 September 1790.
- 4. I now realize that one of the pieces in the British Museum countermarked by Spence is a very worn shilling of William III. This was indeed the one denomination mentioned by William Hone in referring to the dissemination of Spence's Plan, 'respecting which a vast deal of inquiry has been made by persons who have seen the words chalked on the walls, and stamped on shillings' (Hone's broadside Riots in London, Part II . . . elucidating the events of Monday, December 2, 1816; copy in the British Museum bound between pages 106 and 107 in the Place Collection, set 39, unnumbered volume covering 1811–18).
- 5. The Revd. W. R. Hay (who was one of the magistrates at Peterloo) recorded the following very interesting remarks on Spence's muling (S. H. Hamer, 'Notes on some interesting token books and their original owner', Spink's *Monthly Numismatic Circular*, 11 (127), June 1903, cols. 6048–56): 'There were various other dies which, though not apparently mischievous in themselves, were capable of making a strong impression when mixed with others; . . . without arrangement of them one could scarcely conceive how industrious and ingenious these jacobins were in the instance of Medals to poison the minds of the community.'



THE DIES OF THOMAS SPENCE I



		æ	
A.			



II Ch. & K. \*(\*) . . 1.5 4 9 . . \*\* ... ... Mx 880 Nb 18<sup>d</sup> 100 . . 150 • 100 580 . . 200 ٠. • • . . : 3 3:X 23 \* 1 Mx 329

> 0.004 (30.00) (30.00) (30.00) (30.00) (30.00) (30.00) (30.00) (30.00) (30.00) (30.00) (30.00)

1886

C	Pig	Mx 842	311	Mx 846d	Mx 843	Mx 848	Mx 844
D	Bkslr (8)		Mx 706	Mx 711	- 40	÷ (4	200
E	Ass	Mx 716	1808	Mx 719	Mx 717	***	# 0 # 0.
F	J. Spence	Nb 5	004	**************************************	Nb 6	Nb 15	Nb 8
G	Desd. Vil	(*)*	1414	Mx 746	Mx 744	Mx 749	100
H	Dudley	Wo 9	5414	1450	Wo 10	Wo 8e	Wo 13
I	Press G.	Mx 725	Stot	Mx 732	Mx 727	Mx 737	Mx 729
J	Lib. tree	Mx 882	54 GE	Mx 888	Mx 883	Mx 861	Mx 885
K	Bef. Revn	24	50	274	Mx 849	Mx 853	Mx 851
L	Pitt/Fox	Mx 798	924	7414	Note b	Mx 808	Mx 803
M	H. Tooke	Mx 873	Mx 702				Mx 875
N	C. J. Fox	1.00000 PARE 10100 1000	Mx 695	Mx 765	Mx 762	Mx 769	Mx 764
O	Keel '95	Nb 19	2 II	174	EST.	Nb 22	69
P	End oppr.	Mx 818		Mx 823	Mx 819	Mx 825	Mx 821
Q	Mendoza	1610101000	1516 1908	(3//3/3/3/32)	**	Mx 788	217707772
Ř	Dog	94	NAME OF THE PARTY	12/2	99		E650
S	Coing. pr						
T	United	1909	2007 0404	85.	515	750	\$170 #180
Û	Snuffjar	1909		20.4 GW	XX	904 906	F(E)
v	Thelwall		Mx 701	***		***	
w	Gordon '93		Mx 696		Mx 775		100
X	Sailor	* •	Note c	9.5		*•	* (*)
Ŷ	M. S. Boy	\$45 <b>3</b>	Mx 698	99.4		90.6	*0*0
Z	Druid	8252	An 424	5272	202		*300
ĀA	Wmr. sch.	2757	Mx 704	4700	5.5	Z751	50.70
BB	Spaniard	1202	Mx 700	*3	1404	8.6	*0.60
CC	Turk	W4	Mx 703	A54		**	1250
DD	Brighton						
EE	Louis XVI		***	• •	• •	• •	**
FF	Minerva	3308 1509	Mx 699	5808	:875	#id:	2157
GG	Hendon			2009	96F		1890
HH	Forge	***	9.0	200	**	**	• •
II	Anchor '91						
JJ	Flitch	10.000 10.000	***			建煤	2575
KK	Elliot	060* 1614	383 283	0004	50# 50#	988 272	906 902
LL	Hagley					Wo 22	
MM		2515	3517	98.04	17.25		\$35
NN	Howe	12/2	3 <b>6</b> 3.€	383.8 1939	30.00 00.00	**	8040
OO	Orchard		12/12		* *	Ht 3	102
PP	Paine	355	201	1515	1.00		#35G
QQ	Salisbury	380	3 <b>8</b> 0#	908	309	***	8000
RR	Shakesp.	7201e	Wa 321	1202	(2)(2)	276	2022
SS	Hon, Shak.	S#11#	Wa 321	25.00		228	1121
oo TT	Shield	3.00		300	***	(#E#C	4989
11	Shield	7212	200	7270	• •	916	2/2/

E

Brit'nia

Mx 678

F

Shepherd

Mx 690e

Mx 860

Bk 10<sup>e</sup>

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2(2)

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G

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3 Thomas

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Obverses

UU Skidmore

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Rev. Mules

Stag

VV

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His head

B

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Bkslr (9)

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2,020	Mx 720	Mx 722	Mx 721d	2.60	(*:•)	969	(20)	5060	
*1.00	Nb 11	Nb 14	Nb 12	Nb 9	(414)	974	906	9000	
2023 2023	Mx 747	4.4		(200	***	54574	0000	Mx 748	
	Wo 16	Wo 18	Wo 17	Wo 14	1791	Wo 11	V-12	112	
5050	Mx 733	Mx 736	Mx 734	Mx 731	J	Mx 728		Mx 735	M.
× × :	Mx 889	Mx 890	Mx 797	Mx 886	(0.6)	Mx 884	5.5	Mx 817	10000
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	Mx 852			**					
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550	7.04	Mx 877	Mx 796	Mx 876	Mx 878			2.5	
Mx770	Mx 766	14(14)	Mx 767	****	10000	Mx 763	(A) (A)	Mx 768	
* 2	4.4	49	100 - W. W.	Nb 20	62020	340	30X	1004 × 1000000	
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**	0.634	202	102	2020	0.000			6.6	M
**	200	4.4	**	#0#C	1630	286		8383	
	4.6	76.2	4.4	2020	16.6	2424	***	4.4	
26.730	4.1	Mx 867			Mx 868	4.4		Mx 816	
		Mx 779		Mx 777	Mx 780	Mx 776	2674	Mx 778	
6225							Mx 857		
16.6	117.71	355	3.00.0	\$18 <b>5</b> 1	100	12.55		500	
10.00	19193	546	902		2015 2015	0#0G 6#0#1	939	91# 318	
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	200		120	Sx 8	200	86		7404	
	555	(*)*)	5595	55.00		F. 67	3.4	1200	
56.00	0.00	(0.00)		**	80%	5350	2525	36.8	
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53853 58680		100		25.05	200	8.8			
	8080		18.81	1919	200	0000 #0#6	19001 19001	2804	
666	984) 980	1245 1240	1954	5804	374	F355	1995	0011 5404	
1.5	* *					136	99	22	
38363	N.N.	£250	32160	(7)/7	2.0		12/6		
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								4 (1	3/1

M O'Bailey

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0

Caduceus

Mx 679

Anchor

Beg. oppr.

Mx 687

I J K L
Cock, &c. Aft. revn Geo3/ass Ht. in hd.

Mx 686

Mx 685 Mx 689

H Soldiers

Mx 691

TABLE II

Links of Certain and Likely Spence Halfpenny Dies<sup>a</sup>

[Reverses]

					[Re	verses			
Q	R	S	T	U	V	w	X	Y	
Boxers	Cat, lib.	Cat, free	Guillot.	Harp &c.	Highldr.	Freeborn	Gordon '80	Tnstile	Blu
525		Mx 680	23	- 3	Mx 683	(29)		Mx 693	
22.8	£(£)	685	5(5)5	315	# (#)	37781	88.58	13010	
( 6 × 2	#1( <b>4</b> )	(16/9)	1909	400	Mx 710	Mx 709	38(8)	Mx 715	Mx
1202	220	2.402	25	202		Mx 718	70	Mx 723	2
0.02	<b>603</b> 0	Nb 7	059	(5)(1)	Nb 10	35(0))	3(6)	Nb 16	5
1/22	5(5)		0303	57.5	Mx 745	35/50	328	300	2
	100	Wo 12		(5)8	Wo 15	200	589	Wo 20	6
Mx 726	E(W)	(*) *)	Mx 739	× 7.	2022 NA	Mx 730	568	Mx 738	
5575	5%	8555	Mx 892	550	Mx 887	25.50	558	Mx 891	5
3809	Mx 850	2006	Mx 855	(6,0)	Start States	1919	.89	Mx 856d	
712	53.53	Mx 802	* *	1500	Mx 806	889	1254	Mx 810	
363	#(#)	504.040	7874	9.90	4040	366	30	Mx 879	i)
0.5	2127	200	3.7		- H	76.4	8292	Mx 771	0
12.2	535	(0.0)	1869	8.8	Nb 21	2505	325.1	Nb 23	523
ma <sup>SS</sup>	¥383	256.00	8484	(#(#)	200	5869	Saca	Mx 826	240
Mx 785	262	20 (21) Say	27	112			8272	Mx 789	24
	5.50	Mx 751	153		Mx 753	Mx 752	85.87	Mx 756	131
Mx 740	6.60	35650	343	Mx 741	Mx 742	286	V46#	Mx 743	190
44	22	(247)	Mx 901	Mx 899	Mx 900		6242	100	
51	1000	955	5675	J#33*	Lt 18		16.17		3.6
(44)	4.45	67	344	140%	*14	Mx 759	343	Mx 871	(4)
5357	#3H	±(%)	14.61	10.7	X555	00.00	Mx 7821	Mx 781	0.0
194	2761	¥7.43:	90.0	5/34	750	1141411	3374	reconstitution	197
5.50	5.0	0.8	65(5)	25.05	0.7	5257	22.63	Mx 784	82.0
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7.0	5-75	55	35/53	15/75	50B	8206	55/65	Mx 896	300
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	40.0	Mx 509	Mx 494	583	99	634	4.0	4.1	
355		Sx 33	75-	EE	1609	*)*)	(6.83	869	2
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## THREE SEVENTEENTH- AND EIGHTEENTH-CENTURY FINDS

J. P. C. KENT

#### SHEERNESS (ISLE OF SHEPPEY) TREASURE TROVE

#### EDWARD VI-CHARLES I

On 28 August 1968 Mr. J. Sharpin was operating a hydraulic excavator on the site of the new Sheppey Comprehensive School in Minster Road, Sheerness (Nat. Grid TQ 93827276), formerly Clarke's Farm, when he unearthed 417 silver coins, the latest belonging to the end of Charles I's reign. They were contained in a glazed pottery vessel which had been placed inverted on a tile. At an inquest held on 26 September 1968 at Sittingbourne the coins were declared to be treasure trove. As none were required by a museum, the coins were returned to the finder and sold by auction by Glendining & Co. on 10 July 1969, lots 551–79. It is understood that a single purchaser acquired a considerable portion of the find, and intends to lodge a few of the coins with the school. The pot and tile were returned to the Kent Education Committee.

#### LIST OF THE COINS

Edward VI (4): Shilling: Tun 4.

Philip and Mary (2): Shilling: Spanish titles, 1554 above head, value beside crown on *rev. 1*; Spanish titles, date ?, no mark of value *I*.

Elizabeth I (48): Shilling: Lis 1, Crosslets 10, Martlet 12, Bell 2, A 5, Scallop 4, Crescent 2, Tun 3, Woolpack 6, Key 1, 1 1, 2 1.

James I (33): Shilling: 1st Coinage, Thistle, 1st Bust I, 2nd Bust 6, Lis 3; 2nd Coinage, 3rd Bust Lis 5, Lis or Rose I, Rose 5, 4th Bust Rose I, Scallop 2, Grapes I, 5th Bust Coronet I, Tun I; 3rd Coinage, 6th Bust Thistle I, Lis (IACOBVS) I, (IACOB) 2, Trefoil 2.

#### Tower Mint

Charles I (330): Half-crown (25): (1a³) Cross on steps I, (3a²) Tun I, Triangle 3, (4) Triangle in Circle 5, (P) I, (3a³) 3, (R) 3, Eye 3, Sun 4, (5) I. Shilling (303): (1) Cross on Steps I, (2a) Plumes 3, Rose 2, (3¹) Harp 2, Portcullis 3, (3a) Bell 5, Crown II, Tun I5, (4¹) 2, (4³) 6, Anchor II, Triangle 2, (4³/4³) 2, (4⁴/4³) 3, (4⁴) 19, Star 14, Triangle in Circle 70, (P) 40, (R) 23, Eye 16, Sun 22, (4⁵) 10, (4⁵) I Sceptre (4⁵) 4, (4⁵) var. 7, Uncertain 7.

#### York Mint

Half-crown: Horse on ground-line/square uncrowned shield flanked by CR 1, no ground, EBOR/Oval, garnished and crowned shield 1.

#### THE POT AND TILE FOUND CONTAINING THE SHEPPEY HOARD

The hoard was reported to have been found in the pottery jar placed upside down on the tile, which was apparently laid flat with the convex surface uppermost. The position of the pottery jar and the tile as found is reconstructed in Fig. 1.



Fig. 1. Scale 1.

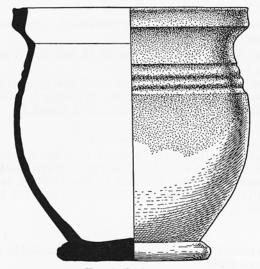


Fig. 2. Scale ½.

The jar is made in a bright red fabric with darker surfaces and fine black specks that are shown up in the glaze. The jar has three grooves around the body beneath the rim which is of square section with an interior hollow for a lid (see Fig. 2). The brown glaze covers the interior of the pot, the rim, and the upper half of the outer surface. The height of the pot is 5.2 ins. and the diameter across the top is 4.9 ins. The tile (see Fig. 3) is

made of a coarser hard fired red fabric but with larger pieces of grit. The tile is broken but its original width was 6 ins.; its present length is 5.3 ins.

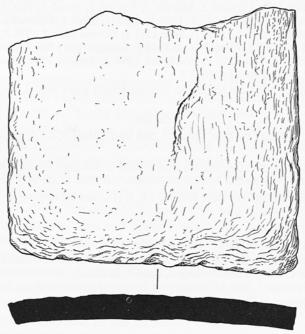


Fig. 3. Scale 1.

The pot, deposited in 1649, is a useful addition to post-medieval Kentish pottery since little is known of seventeenth-century pottery in Sheppey. Brown glazed pottery is frequently found in seventeenth-century contexts, though there is no really close parallel among the published groups of seventeenth-century pottery from Norwich, Bristol, or Colchester.¹ The decoration of the body with grooves is quite common both at Bristol and Colchester; the treatment of the vessel with glaze is paralleled at Colchester (No. 23). There is very little published post-medieval pottery from Kent. Although Wrotham produced plain as well as slip decorated pottery, it seems unlikely that the pot was produced there and it is probably from another Kentish source.

#### HARLAXTON (LINCS.) TREASURE TROVE

#### EDWARD VI-CHARLES I

On 25 April 1968, while digging in his garden, Mr. C. J. Murden, of Glebe House, Harlaxton, found one gold and 141 silver coins, the latest of 1642–3. Though no container survived, they were found together 'as if they had been in a bag'. On 18 July 1968 an inquest held at Grantham declared them to be treasure trove. The find was purchased in its entirety by Lincoln Museum.

of the Essex Archaeological Society, vol. i, Third Series, pp. 1-11.

<sup>&</sup>lt;sup>1</sup> Norwich, see *Norfolk Archaeology*, vol. xxxiii, pt. ii, 1963, p. 163; Bristol, see *Medieval Archaeology*, vol. viii, 1964, pp. 184–212; Colchester, *Transactions* 

#### LIST OF THE COINS

Edward VI (1): y 1

Elizabeth I (53): Shilling (17): Crosslet 2, Martlet 3, Scallop I, Hand 3, Tun 2, Woolpack 2, Key I, 1 I, 2 2. Sixpence (36): Pheon 1561 3, 1562 I, 1565 I, 156// I, Portcullis 1566 I, Lion 1567 I, Coronet 1567 I, 1568 I, 1569 I, 1570 I, Castle 1571 4, Ermine 1572 2, 1573 2, Acorn 1573 I, Eglantine 1575 2, 1576 I, 157// I, Greek Cross 1578 I, Long Cross 1580 I (reverse over 1579 Greek Cross), 1581 I, 1582 I, Tun 1593 2, Woolpack 1594 I, Anchor 1599 (over 1598) I, 1600 (over 1599) I, 2 1602 I. Milled 6d. Star 1562 I.

James I (28): Scots, before accession to English throne: Thistle-merk 1602 I, Half thistle-merk 1602 I.

#### English

First Coinage (7), Shilling: 1st Bust Thistle 1, 2nd Bust Thistle 1, Lis 2. Sixpence: Thistle 1st Bust 2, 2nd Bust 1.

Second Coinage (8), Double Crown: 4th Bust Trefoil 1. Shilling: 3rd Bust Rose 1, 4th Bust Rose 2, Scallop 1, 5th Bust Coronet 1. Sixpence: 3rd Bust Lis 1605 1, 5th Bust Key 1609 1.

Third Coinage (5), shilling: 6th Bust Rose 1, Lis 1, (Plumes on reverse) 2, Trefoil 1.

#### Irish

Shilling (i.e. ninepence in England): Bell 2, Martlet 4.

CHARLES I (60): Half-crown (9): 2c Portcullis 1, 3a<sup>1</sup> Bell 1, 3a<sup>2</sup> Anchor 1, 4 Star 2, Triangle in Circle 4. Shilling (41): 1 Lis 1, 3<sup>1</sup> Portcullis 2, Harp 1, Rose 1, 3a Bell 1, Crown 4, Tun 9, 4<sup>3</sup> Tun 1, Anchor 1, Triangle 1, 4<sup>4</sup> Triangle 1, Star 4, Triangle in Circle 15. Sixpence (10): 3a Bell 2, Crown 1, Tun 1, 4<sup>1</sup> Tun 1, 4<sup>2</sup> Anchor 3, 4<sup>3</sup> Triangle in Circle 2.

#### WESTMANCOTE (BREDON), WORCS., TREASURE TROVE

#### GEORGE III

On 9 January 1969 Mr. F. W. A. Hancock, working as a heating engineer at Tudor House, Westmancote, found beneath the floorboards fifty-seven guineas and two shillings, the latest coin dated 1794, in paper wrappings. On 24 January, an inquest at Pershore found them to be treasure trove. A guinea of 1789 (asterisked in list) was acquired by the national collection; the remainder, not being required by a museum, were returned to the finder. The coins were in excellent condition, and all but one, a guinea of 1787, comfortably exceeded the minimum legal weight of 5 dwt. 8 gr. The presence of the shillings, in uncirculated condition, is a reminder of the scarcity of new silver coins in the late eighteenth century.

#### LIST OF THE COINS

Guineas: Shield type: 1773 1; 1777 1; 1783 1; 1784 2; 1785 4. Spade type: 1787 9; 1788 9; 1789 6 (3 with large 9\*, 3 with small 9); 1790 7; 1791 5; 1792 2; 1793 5; 1794 5.

Shillings: George II, 1758 1. George III (with semée on shield) 1787 1.

# THE ORIGIN OF SPANISH DOLLARS ACQUIRED BY BRITAIN, 1799–1805

#### J. D. A. THOMPSON

THESE notes were first compiled as background material for an article published in this *Journal* in 1953; since then I have more than once had occasion to refer to them for my own purposes, and Mr. W. A. Seaby has acknowledged their use in pinning down the exact or approximate origin of some of the millions of dollars which came into the British Isles during the Napoleonic Wars. Now that his article is published it seems worth printing my notes as an appendix to both papers.

The following entries cover a very limited period, 1799 to 1805. There are several reasons for this; firstly, printed records of dollars and bullion entering this country are scarce before 1799, when the *Naval Chronicle* (my best source) was first published. Secondly, few if any details of this sort appear after 1805, and thirdly, these six years were undoubtedly the most prolific in the intake of specie and bullion—at a conservative estimate about five million dollars, irrespective of gold and silver bullion, were acquired either by capture at sea, or by purchase. Some were bought by the British Government, some by merchants and private speculators—often dishonest ones—and there was also a large and fairly well-organized trade in dollars smuggled out of Spanish ports, usually by individuals in H.M. ships and in the merchant service.<sup>3</sup>

It would be no easy task to estimate how much specie found its way into the Royal Mint, or to private companies for counterstamping, to Boulton's mint at Birmingham for recoining into Bank Dollars, or into the melting-pot, but some of the entries in the *Naval Chronicle* and elsewhere do provide an elementary guide to origin and to the circumstances of acquisition. My chief sources are (i) the *Naval Chronicle* for 1799–1805, (ii) the memoirs and letters of several distinguished naval officers, among them Lord Cochrane and Sir William Parker.

1. 15 October 1799. Spanish treasure frigates *Thetis* (34 guns) and *Santa Brigida* (34 guns), from Vera Cruz (Mexico) to Spain. Taken off Ferrol by H.M. frigates *Naiad* (38), *Ethalion* (38), and *Triton* (32).

The two treasure-ships carried between them about 2,811,526 dollars, besides valuable cargoes of cocoa. They were brought into Plymouth on 21–22 October, and the treasure was deposited in Russell's warehouses, and on 23 and 25 November it was sent to London in a procession of wagons, guarded by seamen and the Somerset Provisional Cavalry.

Destination: The Bank of England. Prize money: Captains, £40,730. 18s. each; Lieutenants, £5,091. 7s. 3d. each; Warrant Officers (Masters, Gunners, Boatswains, Carpenters), £2,468. 10s.  $9\frac{1}{2}d$ . each; Midshipmen, £791. 17s.  $0\frac{1}{4}d$ . each; Seamen and Marines £182. 4s.  $9\frac{1}{2}d$ . each. Marine officers and surgeons are not mentioned, but would rank with Lieutenants and Masters. The Santa Brigida is said to have been carrying 1,400,000 dollars, and the Thetis 1,411,526 dollars.

Source of treasure: Mexico (and Central America?).

Naval Chronicle, ii (1799), pp. 534 and 638; Steel, Naval Chronologist (1806), p. 38; James, Naval History, i, p. 401; Laird-Clowes (ed.), The Royal Navy, iv, pp. 525-6.

<sup>2</sup> W. A. Seaby, 'Castlecomer Tokens: an Inquiry',

<sup>&</sup>lt;sup>1</sup> J. D. A. Thompson, 'British Currency and the Importation of Bullion, 1793–1840', in *BNJ* 1953, pp. 73–9. in *BNJ* 1965, pp. 139–48.

<sup>3</sup> For details of the smuggling trade see my paper of 1953.

2. 26 November 1799. 'Arrived the Eurydice of 24 guns, Captain Talbot, from Portsmouth, and the Melampus, 36, Captain Moore, from a cruise. She is to take on board dollars, part of the treasure of the Spanish galleons, to the amount of 40,000 l., said to pay the British and Russian troops in Guernsey and Jersey.'

Naval Chronicle, ii, p. 638 (Plymouth Report). Captain Graham Moore, mentioned later, was the brother of General Sir John Moore. The British and Russian troops belonged to the allied army defeated in Holland in 1799.

3. 1799. Letter from Vice-Admiral Sir Hyde Parker, Commander-in-Chief, Leeward Islands Station, to Evan Nepean, Secretary to the Admiralty. A list of captures made by his squadron in 1799. Only one ship contained dollars.

'Spanish Schooner Conception, 121,000 dollars on board, from La Vera Cruz, bound to Havannah; the Master an ensign in the Spanish Navy.'

Source of treasure: Mexico.

Naval Chronicle, iii (1800), p. 68 (Gazette Letters).

4. 1800. Three Dutch vessels from Java to Ternate, taken by H.M.S. *La Virginie*. Together they contained specie to the amount of 17,943 Spanish milled dollars, exclusive of other valuables.

Note: It is doubtful if this treasure ever reached England, as it was probably disposed of by The Admiralty Prize Courts at Calcutta or Bombay.

Source of treasure: Uncertain.

Naval Chronicle, v, pp. 182 and 248 (East Indies Report).

No captures for 1801-3 are reported. This is mainly due to the Peace of Amiens (1802-3).

5. 1804. La Caridad, French privateer, with 25,000 dollars. Taken by H.M.S. Desirée on the Jamaica Station.

Source of treasure: Uncertain, perhaps Mexico.

Note: The name of this ship is Spanish, but she may have been under French colours when taken.

6. 31 May 1804. 'A large quantity of dollars were landed yesterday from the *Aeolus* Frigate, Capt. Lord A. Fitzroy, from Jamaica, and forwarded to London.'

Source of treasure: These dollars were probably an official purchase by the British Government from the Spanish authorities at Vera Cruz in Mexico. They were originally shipped to England in the French prize Duquesne, from Port Royal in Jamaica; the Duquesne went ashore and had to return to port so the Aeolus (in charge of a West India convoy) brought the treasure home.

Naval Chronicle, xii (1804), p. 507 (Portsmouth Report).

7. June–July 1804. 'Came in this afternoon [26 June] the Felix armed Schooner, 14 guns, Lieutenant Bourne, with three valuable Chasses Marees, her prizes, having on board several chests of silver, about 160,000 dollars, captured close in with the Franch coast, bound from Corunna to France, supposed to be part of the French subsidy from the Court of Madrid.' [1 July] 'Yesterday morning, the Chests of dollars taken in the Chasses Marees off the coast of France by the Felix schooner, Lieutenant Bourne, were landed by the Agent, put into Russell's waggon, under escort, to be forwarded to the Bank of England as bullion.'

'The dollars were secreted under a quantity of Indian corn in each Chasse-Maree, with which they were laden in bulk.'

Source of treasure: Spain (and Spanish-America?). Probably a mixture of Metropolitan mints—e.g. Seville and Madrid—and those of Central and South America.

Naval Chronicle, xii (1804), pp. 162 and 251-2.

Notes: (a) Chasse-Marée: A type of French lugger used mainly in fishing, smuggling, and privateering, but also, as the term implies, for coastguard duties. (b) The practice of hiding money under the normal cargo was a very old one, dating from the sixteenth century, and from the great days of the buccaneers in the Pacific and Caribbean.

8. September-October 1804. Capture or destruction of four Spanish treasure-frigates, *Medea, Fama, Mercedes*, and *Clara*, by H.M. ships *Indefatigable*, *Medusa*, *Lively*, and *Amphion*, under Captain Graham Moore of the first-named ship, off the Spanish coast, on 30 Sept. 1804.

Sources of bullion and specie: La Plata and Montevideo (S. America).

The following details are from Gazette Letters printed in the *Naval Chronicle*, xii (1804), pp. 322-4 and 499-500 (*Plymouth Report*) and xiii (1805), *Appendix* (diplomatic correspondence with Spain over this incident, resulting in a declaration of war by Spain in 1804). See also the accounts of this action by James, iii, p. 280, and Laird Clowes, v, pp. 350-2.

#### (1) Letter from Captain Moore to Admiral Cornwallis

'Indefatigable, Plymouth Sound October 19, 1804.

Sir,

I have to inform you of the arrival at this port of his Majesty's Ship under my command, with the Amphion, which I thought proper to order to England for the security of the two Spanish Frigates, La Medée and La Clara, which we have brought with us. We have seen nothing of the Medusa and Lively, with the Spanish Frigate La Fama, since the evening of the action, when they parted from us I enclose a copy of the account delivered to me by the Spanish Major of the Squadron, of the treasure and cargo on board the four ships.

I have the honour to be, &c (Signed) Graham Moore

The Hon. Admiral Cornwallis, Etc., etc., etc.

'A General Statement of the Goods and Effects brought by the Frigates of this Division, Commanded by Don Joseph de Bustamente y Guerra, Chief of the Squadron of the Royal Navy.

#### On Account of the King

Medée—35 sacks of Vidona wool, 20 chests and sacks of Cascarilla, 1627 bars of tin, 203 pigs of copper, and 521,940 dollars in silver.

Fama—300 bars of tin, 28 planks of wood, and 30,000 dollars in silver.

Mercedes—20 sacks of Vidona wool, 20 chests and sacks of Cascarilla, 1139 bars of tin, 961 pigs of copper, and 221,000 dollars in silver.

Clara—20 sacks of Vidona wool, 20 chests and sacks of Cascarilla, 1666 bars of tin, 571 pigs of copper, and 234,694 dollars in silver.

Total—75 sacks of Vidona wool, 60 chests and sacks of Cascarilla, 4732 bars of tin, 1735 pigs of copper, 28 planks of wood, and 1,307,634 dollars in silver.

#### On Account of the Merchants

Medée—32 chests of ratinia, 952,619 dollars in silver, 279,502 gold reduced into dollars, and 24,600 ingots of gold reduced into dollars.

Fama—316,597 dollars in silver, 217,756 gold, reduced into dollars, and 25,411 ingots of gold reduced into dollars.

Mercedes—590,000 dollars in silver.

Clara—622,400 gold, reduced into dollars.

Total—32 chests of ratinia, 1,859,216 dollars in silver, 1,119,658 gold, reduced into dollars, and 150,011 ingots of gold, reduced into dollars.

On Account of the Marine Company

Medée—8,995 seal skins.

Fama—14,930 seal skins.

Clara—10 pipes of seal oil.

Total 26,926 seal skins, and 10 pipes of seal oil.'

(2) Note: Everything in the Mercedes must be deducted from these totals, as she was blown up during the action. I take it that the gold and gold ingots 'reduced into dollars' means gold dust and ingots 'worth so many dollars'. In actual currency dollars the total capture appears to have been

521,940 30,000 234,694 786,634 on the King's account 925,619 316,597 1,242,216 on the Merchant's account 786,634 1,242,216 Grand total 2,028,216

- (3) 'All the public and private treasure, with the plate belonging to individuals, in the Spanish Ships, is ordered to be landed under the care of the Custom-house here, and forwarded to the Bank of England, under escort of the 4th Dragoon Guards; the merchandize on board them is to be placed in warehouses' (Plymouth Report).
- 9. 1804. 'A fine Spanish Brig, el Guixolenza, from the Havannah, laden with cochineal, coffee, and 10,000 l. in dollars, detained by the Maidstone Frigate, is arrived at Plymouth.' Source of treasure: Probably Mexico. The exact number of dollars is not given, but should be 40,000. Naval Chronicle, xii (1804), p. 502 (Plymouth Report)
- 10. 20 October 1804. 'The Ship Spy, Captain Clark, from the South Seas, arrived here on Sunday last, laden with a large quantity of gold and silver, belonging to Mr. Hurry of Gosport, being the successful produce of a cargo of British Manufactures with which she traded with the inhabitants of South America. The bullion estimated at 100,000 l., and contained in upwards of 100 large casks, was deposited in the Gosport Bank, from whence it was conveyed on Tuesday morning, in three wagons, to the Bank of England, under a strong guard.'

'The arrival of so much specie at such a time of want is a fortunate accession; and we hope it will assist the circulation of the new dollars, of which part of the cargo, to the amount of 47,000 l. consists.' Source of bullion and specie: South America.

Naval Chronicle, xii (1804), p. 507 (Portsmouth Report).

11. 29 December 1804. 'This afternoon were landed from the Malta of 84 guns, Captain Buller, lately arrived from off Ferrol, several barrels, containing nearly 60,000 dollars in silver, consigned from merchants in Spain to their correspondents in London. They were deposited in Russel's waggon warehouses, previous to their being sent to London under a proper escort.'

Sources of treasure: Ferrol in N.W. Spain (Spanish and S. American mints?).

Sixty thousand dollars was the *official* amount brought to Plymouth in the *Malta*, but this takes no account of private (and illegal) trade by her officers and crew (see my paper of 1953 for an account of silver smuggling about this time).

The Malta's consignment of dollars came into Britain on the eve of hostilities with Spain, after Moore's capture of the treasure-frigates (No. 7).

Naval Chronicle, xiii (1805), p. 80 (Plymouth Report).

12. November–December 1804. 'The Spanish ship Agila Corodora of 500 tons burthen, from Cartagena [S. America] to Ferrol, laden with cotton, logwood, and a quantity of dollars, was taken by the Malta Man-of-War and is arrived at Falmouth.'

Sources of treasure: Colombia, Peru, Chile? Cartagena in Venezuela was an important treasure-port on the 'Spanish Main'.

Naval Chronicle, xiii (1805), p. 88 (Lloyd's Marine List of Ships Lost and Captured). H.M.S. Malta was a French prize, the Guillaume Tell, taken off Malta in 1800.

13. 'The Spanish Brig Estrella Divina from Vera Cruz to Barcelona, with 268,950 dollars, and a valuable cargo, was taken 8th February, by the Endeavour, M'Millan [Master], of Liverpool, and since taken possession of by the Egyptienne Frigate, who took out the specie, and is arrived at Falmouth.'

Source of treasure: Mexico. Reference: As above.

*Note*: The *Endeavour* was presumably a Liverpool privateer, or a merchantship with a Letter-of-Marque; it seems hard on her captain that the Navy should deprive him of his windfall.

14. 5 January [1805]. 'Arrived from a cruise off the coast of Spain, the Diamond, 36 guns, Cap. Elphinstone, with a most beautiful Spanish corvette, the Infante Carlos, from the Havana, was despatched to Corunna; laden on the King of Spain's and merchants' account with a valuable cargo and 120,000 dollars in specie.'

Source of treasure: Mexico?

Naval Chronicle, xiii (1805), p. 81. (Plymouth Report).

Allowing for a lapse of time in reaching Plymouth, this should probably be included in the 1804 captures.

15. 'Came in the Naiad of 36 guns, Captain Dundas, from a cruise off the coast of Spain, with a large rich Spanish ship, bound to a Port in Spain, with 200,000 dollars on board; besides a valuable cargo of sundry dry goods.'

Source of treasure: Uncertain (Spanish America).

Reference: As above. An 1804 capture?

16. 'The Spanish ship Providence, of 350 tons, from Montevideo to St. Andero [Santander?], with hides, tallow, cotton, etc., and 14,000 dollars, has been taken and carried into Jersey, by the Lottery Privateer of that Island.'

Source of treasure: S. America.

Naval Chronicle, xiv (1805), p. 263 (Lloyd's List, 1-22 March 1805).

17. 'The Sacra Familia,—from Vera Cruz, with sugar, logwood, and 149,000 dollars; and the Fortuna,—from Vera Cruz, with mahogany, logwood, and 432,000 dollars arrived at Plymouth 7th March [1805].

Source of treasure: Mexico.

Naval Chronicle, xiv (1805), p. 263 (Lloyd's List, 1-22 March 1805).

Note: These two vessels were prizes to Lord Cochrane in H.M.S. Pallas—see No. 19 below.

18. [27 January 1805]. H.M.S. *Amazon* (Captain William Parker), cruising off the Spanish coast. The Chase showed Spanish Colours. She was overtaken and boarded. The officer returned, hardly able to articulate from excitement.

'She is the Gravina, Sir, of 6 guns.'

'Well, what is her cargo?'

'Oh, Sir, she has hides and indigo.'

'That is capital'; but seeing that the Lieutenant was still more excited, 'Anything else?'

'Yes, Sir, cochineal!'

'Still better. What is the matter? Any more?'

'Sir, she has three hundred and thirty thousand dollars in hard coin beside!'

The dollars were transferred to the *Amazon*, and on the 12th [February] she captured a brig from Rio de la Plata to Cadiz, with 8,300 more dollars, besides her cargo.

The Amazon arrived at Gibraltar on the 20th, and finding that the garrison was short of money, William Parker supplied the Commissariat with all the dollars, receiving Government Bills for his share and Nelson's (the latter's amounted to £10,000). The Amazon's crew were paid part of their prizemoney (? in dollars) on the 24th–25th. Parker rejoined Nelson off Toulon and presented him with the

£10,000 (his share as Commander-in-Chief). The actual amount of specie in the *Gravina* was 127,000 dollars in addition to her cargo. Parker's share from the two prizes amounted to at least £18,653, though he is not specific on this point in his letters home. He probably made a fortune of £20,000. *Source of treasure*: Vera Cruz in Mexico.

The Life of Admiral Sir William Parker, by Rear-Admiral Augustus Phillimore (1876), i (1781–1830), pp. 266 ff. (Phillimore was Flag-Lieutenant to Parker in the 1830s, and the above episode was told to him by the Admiral.)

Note: It is probable that the greater part of this treasure never came to England, as it went into the pockets of the Gibraltar garrison, and also to the prize-court at Malta where the ship was finally condemned. Some dollars may have got to England eventually as prize-money of the Amazon's company.

19. 1804-5. The cruise of the Pallas, Lord Cochrane.

Quoting the local Plymouth newspaper. (Square brackets are mine.)

'February 24th [1805]—came in the "Carolina" from Havannah, with sugar and logwood, captured on the 12<sup>th</sup> instant off the coast of Spain by the "Pallas" of 32 guns, Captain Lord Cochrane'. The *Pallas* was in pursuit of another with a very valuable cargo when the *Carolina* left. 'His Lordship sent word to Plymouth, that if ever it was in his power, he would fulfil his public advertisement (stuck up here) for entering seamen, of filling their pockets with Spanish "pewter" and "Cobs", nicknames given by the seamen to ingots and dollars.'

'March 7—came in a rich Spanish prize with jewels, gold, silver, ingots and a valuable cargo, taken by the "Pallas", Captain Lord Cochrane. Another ship, the "Fortuna", from Vera Cruz, had been taken by the "Pallas", laden with mahogany and logwood. She had 432,000 dollars on board, but has not yet arrived.'

'March 23—came in a most beautiful Spanish letter-of-marque of fourteen guns, said to be a very rich and valuable prize to the "Pallas", Captain Lord Cochrane.' [? The Fortuna.]

[Cochrane's own text, p. 109]: 'A still greater sensation was excited by the arrival of the "Pallas" herself, with three large golden candlesticks, each about five feet high, placed upon the mast-heads. The history of these is not a little curious. They had been presented by the good people of Mexico, together with other valuable plate, to some celebrated church in Spain, the name of whose Patron Saint I forget, and had been shipped on board one of the most seaworthy vessels.

'Their ultimate destination was, however, less propitious. It was my wish to possess them, and with this view, an arrangement had been made with the Officers and crew of the "Pallas". On presenting the candlesticks at the Custom-house, the authorities refused to permit them to pass without paying the full duty, which amounted to a heavier sum than I was willing to disburse. Consequently, although of exquisite workmanship, they were broken in pieces and suffered to pass as old gold.'

[p. 111]: 'Of the proceeds of the above-mentioned captures—all made within ten days—Sir William Young,<sup>2</sup> on the strength of having recopied my orders from the Admiralty, *claimed and received* half of my share of the captures. No wonder that Lord St. Vincent said of him, that he wished "to have the power of giving orders, and so share prize-money".'

Source of treasure: Mexico, S. America.

Naval Chronicle, xiii and xiv (1805) and Thomas, tenth Earl of Dundonald (Lord Cochrane), The Autobiography of a Seaman (1861), pp. 107 ff.

*Notes*: 1. These 'ingots' must be bars of tin, not gold. They figure largely in the cargoes of the ships taken by Moore. The term 'Cob' was usually applied to the irregularly shaped and lumpy Peru dollars, though Mexico must have been represented on this occasion.

2. The Port-Admiral at Plymouth. He behaved most ungenerously on this occasion and showed great animosity against Cochrane in later years. Cochrane's orders were received directly from the Admiralty and Young had therefore no authority over him. By recopying the Admiralty orders in his own name, Young automatically put the Pallas on his Station (Plymouth), and was therefore entitled to a Flag-Officer's share in all her prizes. Naturally Cochrane resented this sharp practice, but, as he admits, he could not complain too much as he made a personal fortune of £70,000, even without his famous candlesticks. His gesture of hoisting them to his mast-heads on entering Plymouth was characteristically flamboyant, and quite in keeping with his promise to the seamen of 'filling their pockets' with Spanish treasure. Neither was calculated to appease Sir William Young!

20. February–March 1805: 'The N[uestra] S[enora] del Rosario, Spanish ship of 200 tons, from River Plata, laden with 70,000 dollars, cochineal, coffee, sugar and logwood, was captured about 18 days since off the Western Islands, by the Uranie Frigate, and is arrived at Falmouth.'

Source of treasure: South America.

Naval Chronicle, xiv (1805), p. 176 (Lloyd's Marine List of Ships Lost and Captured: 8 Feb. to 1 March 1805).

- 21. 'The Polacre Judas Jodes, with 80 troops, and 12,000 dollars; the ship Reysarias [? Rosario] Pearl [? Perla], with skins, cinnamon, copper, and 112,000 dollars; the Polacre Virgin del Carmen, in ballast, and 10,750 dollars; and a vessel with 6,800 dollars, were [all] detained in the Mediterranean, by the squadron under the command of Lord Nelson, between 18th November and 5th December [1804].' Source of treasure: W. Indies or S. America. Reference: as above.
- 22. 'The Ecce Homo, from the River Plate; The Astegarasa Register Ship, from Lima; The Princesa de la Paz, from River Plate; the Brilliante, from Vera Cruz, all laden with specie, cochineal etc. are taken by the Endymion Frigate, and arrived at Portsmouth.'

  Source of treasure: Mexico and S. America. Amount not given.

Reference: As above. Note: The 'Register Ship' was an official treasure ship from Mexico or Peru.

## SEVEN FINDS OF SIXTEENTH- TO TWENTIETH-CENTURY COINS

#### S. A. CASTLE

#### COPLE (BEDS.) TREASURE TROVE

A HOARD of thirty-five sixteenth- and seventeenth-century silver coins was found during ploughing operations in a field at Cople, Bedfordshire, on 23 March 1969. The coins, which may represent part of a much larger hoard, were found at a depth of approximately 18 in. with some scattered near the ground surface. In the absence of any form of container it cannot be certain that the thirty-five coins constitute the entire hoard and this indeed may explain the absence of coins of James I.

To judge by the condition of the latest coin, a crown of 1680, the coins clearly represent the savings of a person who for political or economic reasons deposited them in the earth shortly after that date.

A verdict of treasure trove was returned at the inquest held at Bedford on 30 May 1969. As it has not been found necessary for the British Museum or Bedford Museum to acquire any of its contents, the hoard has been returned to the finder.

		ELIZABET	н 1558–	1603	
					North
1.	Shilling	1583-1603	mm	tun	2014
2.	Shilling	1583-1603	mm	woolpack	2014
3-5.	Sixpences	156?		•	
6.	Sixpence	1572	mm	?	1997
7.	Sixpence	1573?	mm	large cross	1997
8.	Sixpence	1575	mm	?	
9-11.	Sixpences	1580	mm	large cross	1997
12.	Sixpence	1591	mm	hand	2015
13.	Sixpence	1601	mm	?	
		CHARLES	I 1625-	-49	
14.	Half-crown		mm	heart	2204
15.	Half-crown		mm	crown	2209
16.	Half-crown		mm	(R)	2213
17.	Half-crown		mm	eye	2213
18.	Half-crown		mm	eye	2213
19.	Half-crown		mm	triangle in circle	2214
20.	Half-crown		mm	triangle in circle	2214
21.	Half-crown		mm	(P)	2232
22-6.	Shillings		m.m.	?	
27.	Sixpence		m.m.	harp	2294
28.	Sixpence		m.m.	anchor	2244
		Соммо	NWEALT	н	
29.	Shilling	1656	m.m.	sun	2794

#### CHARLES II 1660-85

			Seaby
30.	Crown	1672	45
31.	Crown	1676	51
32.	Crown	1677	52
33.	Crown	1680	60
34.	Half-crown	1673	473
35.	Half-crown	1676	478

J. J. North, English Hammered Coinage, ii; H. A. Seaby, English Silver Coinage from 1649.

#### SEEND (WILTS.) TREASURE TROVE

On 11 March 1969, a hoard of five gold and thirty-three silver seventeenth- and eighteenth-century coins was found by Mr. J. H. Sinclair, on a site at 'The Old Bakehouse', Seend, near Devizes, Wiltshire. The earliest coin was a crown of 1662, the latest a guinea of 1719. A notable feature is the superb condition of the guineas of 1715 and 1719, in contrast to the exceedingly poor state of the shillings of William III and Anne. The considerable wear shown even by the latest shillings of 1711 suggests that these coins had circulated for a good many years subsequent to the date of the latest coin in the find.

The find was declared treasure trove at an inquest held at Melksham on 14 August 1969; it has been sold to the trade.

Weight grains   Spink
2.       Crown       1662       435·5       No. 653         3.       Half-crown       1670       211·8       No. 703         4.       Half-crown       1676       214·8       No. 713         5.       Half-crown       167-       218·5          6.       Shilling       16—       73·9
2.       Crown       1662       435.5       No. 653         3.       Half-crown       1670       211.8       No. 703         4.       Half-crown       1676       214.8       No. 713         5.       Half-crown       167-       218.5          6.       Shilling       16       73.9
4.       Half-crown       1676       214·8       No. 713         5.       Half-crown       167-       218·5          6.       Shilling       16—       73·9
5. Half-crown 167- 218·5 6. Shilling 16- 73·9
6. Shilling 16— 73.9
WILLIAM III 1689-1702
7. Half-guinea 1700 62·3 No. 195
8. Half-crown 1697 214·9 No. 836
or 837
9–10. Half-crowns 16– 219·3, 211·6
11–13. Shillings 1696 87·8, 82·3, 80·4
14. Shilling 1696 76·2 No. 858
15. Shilling 1697 89.8 No. 877
16–17. Shillings 1698 86·5, 83·3 No. 879
18–29. Shillings dates uncertain 88·2, 88·1, 86·2, 85·8, 84·3, 83·6,
83.2, 82.1, 81.6, 81.3, 80.2, 78.2
30–1. Sixpences 1697 45·2, 37·1
32–3. Sixpences dates uncertain 45·2, 41·7
Anne 1702-14
34. Guinea 1708 127·3 No. 218
35–6. Shillings 1711 87·4, 86·4 No. 969
George I 1714-27
37. Guinea 1715 127·1 No. 247
38. Guinea 1719 127·6 No. 251

Spink, The Milled Coinage of England 1662-1946.

#### NEWENT (GLOS.) TREASURE TROVE

During structural alterations to the George Hotel, Church Street, Newent, Gloucestershire, on 18 April 1969, Mr. P. Evans and Mr. S. Lewis discovered a hoard of eighteenth-century gold coins. The hoard comprised forty gold guineas and four gold half-guineas, all of the reign of George III.

An inquest was held at Newent on 4 June 1969 at which a verdict of treasure trove was returned.

As none of these coins was required either by the British Museum or Gloucester Museum, they were returned to the finders.

	GEOR	GE III
	Gui	neas
1-2.	1769	Decorated Shield
3.	1773	,,
4–6.	1775	,,
7–9.	1776	,,
10–11.	1777	,,
12.	1778	,,
13–18.	1785	,,
19.	1786	,,
20-2.	1787	Spade Shield
23-6.	1788	,,
27-30.	1789	,,
31–2.	1790	,,
33-6.	1791	,,
37-9.	1793	,,
40.	1794	,,
	Half-g	ruineas
41.	1788	Spade Shield
42–3.	1791	,,
44.	1798	,,

#### UFFINGTON (LINCS.) TREASURE TROVE

A hoard of one gold and forty-eight silver eighteenth- and nineteenth-century coins was found in the grounds adjacent to the Bertie Arms public house at Uffington in Lincolnshire. The find was made on 11 September 1969 by Mr. C. Glenn and Mr. J. Jeffries, whilst engaged in laying a new water service.

An inquest was held at Stamford on 14 October where a verdict of treasure trove was returned. The coins have been returned to the finders.

	George III 1760-1820	
1.	Half-guinea	1798
2.	Bank token, three shillings	1812
3-4.	Half-crowns (shoulder type)	1817
5-6.	Half-crowns (neck type)	1817
7.	Half-crown	1818
8–16.	Shillings	1816
17-28.	Shillings	1817
29.	Shilling	1818

30-2.	Shillings	1819
33-40.	Sixpences	1816
41-4.	Sixpences	1817
45-6.	Sixpences	1818
47.	Sixpence	1819
48-9.	Sixpences	1820

#### PORINGLAND (NORFOLK) TREASURE TROVE

On 3 February 1969 a hoard of forty-six nineteenth-century silver coins was found in or near two hessian bags in the roof of Ormesby Cottage at Poringland, Norfolk. The find was declared treasure trove at an inquest held at Poringland on 14 February 1969. None of the coins submitted were required for the national collection.

George III 1760-1820				
1.	Sixpence	1816		
WIL	LIAM IV 1830-7	7		
2.	Shilling	1837		
VICT	ORIA 1837-190	1		
3.	Halfcrown	1842		
4–6.	Shillings	1838		
7–12.	Shillings	1839		
13–14.	Shillings	1840		
15–16.	Shillings	1841		
17–22.	Shillings	1842		
23.	Shilling	1843		
24-6.	Shillings	1844		
27-8.	Shillings	1845		
29.	Shilling	1846		
30.	Shilling	1851		
31–3.	Sixpences	1839		
34.	Sixpence	1840 -		
35-6.	Sixpences	1841		
37–8.	Sixpences	1842		
39-42.	Sixpences	1844		
43-4.	Sixpences	1846		
45-6.	Sixpences	1851		

Misc., George II halfpenny 1799 and a thimble.

#### THE TINTWISTLE HOARD OF NINETEENTH-CENTURY GOLD COINS

Eleven gold sovereigns and thirty-four gold half-sovereigns were found by Mr. J. R. Crossland underneath a floorboard in a bedroom of 87 Woodhead Road, Tintwistle, Cheshire, on 8 December 1968. An inquest was held at Hyde on 17 January 1969 where a verdict of treasure trove was returned.

The coins were then submitted to the British Museum for examination. However, it has not been found necessary for the British Museum to acquire any of the pieces, all of which were sold to the trade.

VICTORIA					
Sovereigns					
No.	Date	Type		Die	
1.	1857	Shield			
2.	1860	,,			
3-4.	1862	,,			
5-8.	1871	St. George			
9.	1872	,,			
10.	1872	Shield			
11.	1873	,,			
	TT-1	C			
	Haij	f-sovereigns			
12.	1835	Shield			
13–14.	1842	,,			
15.	1845	,,			
16.	1852	,,			
		,,			
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30.		,,			
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		"			
		,,			
44.	1872	,,		223	
17. 18–19. 20. 21. 22. 23–6. 27. 28. 29. 30. 31–2. 33. 34–5. 36. 37. 38. 39. 40. 41. 42.	1853 1855 1856 1857 1858 1859 1860 1861 1863 1865 1866 1866 1869 1870 1871 1871 1871 1872 1872	); ); ); ); ); ); ); ); ); ); ); ); ); )		2 10 16 34 23 33 64 69 33 42 99 110 223	

# THE WANTAGE HOARD OF NINETEENTH- AND TWENTIETH-CENTURY GOLD COINS

197

1878

45.

On 20 July 1968 Mr. A. G. Pocock discovered a hoard of nineteenth- and twentieth-century gold coins under a floorboard in a cupboard under the staircase of 14 Larkhill, Wantage, Berkshire. An inquest was held at Wantage on 30 January 1969 and a verdict of treasure trove was returned.

Forty-five gold sovereigns and two hundred and nineteen gold half-sovereigns were submitted to the British Museum for examination. It has not been found necessary for the British Museum to acquire any of the pieces submitted, which have now been sold to the trade.

#### VICTORIA

#### Sovereigns

No.	Date	Type	Die
1.	1859	Shield	
2-3.	1862	,,	
4. 5.	1864	,,	
5.	1872	,,	
6.	1872	St. George	
7.	1873	,,	
8.	1874	,,	
9.	1876	,,	
10-11.	1880	,,	
12.	1881	,,	
13–16.	1889	,,	
17.	1892	,,	
18.	1894	,,	
19.	1895	,,	
20-1.	1896	,,	
22.	1898	,,	
23-5.	1899	,,	
26.	1900	,,	
27.	1901	,,	

#### EDWARD VII

28-9.	1902	St. George
30.	1904	,,
31–2.	1905	,,
33–4.	1906	,,
35–6.	1907	,,
37–8.	1908	,,
39–42.	1910	**

#### GEORGE V

43-4.	1911	St. George
45	1912	

#### VICTORIA

#### Half-sovereigns

1866	Shield	No. 55
1872	,,	No. 297
1884	,,	
1887	,,	
1890	,,	
1891	,,	
1892	,,	
1893	St. George	
1894	,,	
1895	,,	
1896	,,	
1897	,,	
1898	,,	
1899	,,	
1900	,,	
1901	,,	
	1872 1884 1887 1890 1891 1892 1893 1894 1895 1896 1897 1898 1899 1900	1872

#### EDWARD VII

No.	Date	Type
115-32.	1902	St. George
133-41.	1903	,,
142-6.	1904	,,
147–58.	1905	,,
159–75.	1906	,,
176–90.	1907	,,
191–210.	1908	,,
211–20.	1909	,,
221–35.	1910	**

#### GEORGE V

236-43.	1911	St. George
244-52.	1912	,,
253-7.	1913	,,
258-63.	1914	,,
264.	1915	,,

#### MISCELLANEA

#### FIVE RECENTLY FOUND ANCIENT BRITISH COINS

DURING the season 1968-9, four coins from the Coritani tribe were picked up on known Iron Age sites in Lincolnshire and Rutland. The first was found by myself at Dragonby in Lincolnshire in September of 1968, and is a most interesting prototype gold stater.

Obv.: Portions of the laureate head of Apollo to the right.

Rev.: Crude horse to the left with rosette and large central pellet beneath; an exaggerated exergual line. Above a crescent and pellets. Ring ornament in front.

Weight: 89.5 grains.

Mack reference: 54 variety.

Pl. IX. 1.

The most significant feature of the coin is the distinctive exergual line, which shows in full; and has enabled me to subdivide this class of stater from the others, which are illustrated by Commander Mack as No. 54.

This coin is a die duplicate to a coin in the Fitzwilliam Museum at Cambridge, No. 41 of the *Sylloge*, and the reverse die duplicate to a coin in the British Museum, and one in the collection of Major Lister.

The next two coins are half silver denominations, both found on the same day in February 1969 by myself at the Owmby Cliff site in Lincolnshire. The details are as follows:

Obv.: Blank.

Rev.: Horse to left with a rosette of joined pellets above.

Weight: 7 grains.

Mack reference: 456.

This coin is a die duplicate to a coin found at South Ferriby, reference BNJ iii (1906), Pl. i. 23.

The second of these two coins may be described as follows:

Obv.: Blank.

Rev.: Horse to right with a rosette of pellets above.

Weight: 6 grains.

Mack reference: 454 A.

The fourth coin was found in February of 1969 on the Thistleton site in Rutland and is an inscribed full silver denomination of the so-called *Aun Ast* coins.

Obv.: Blank.

Rev.: Horse to left, AVN above, TVos below neck and body.

Weight: 16 grains.

Mack reference: 458.

Pl. IX. 2.

Having studied all the known copies of this class of coin, I have come to the conclusion that the nearest reading we can get is either a Aun Ost or Aun Vost, but both of these readings are uncertain.

The fifth coin I should like to mention is a rare gold stater of the Cantii tribe, attributed to their King Dubnovellaunus, found on the beach of the Isle of Sheppey in August 1969.

Obv.: Plain with a raised band across the field.
Rev.: A horse to right with UNO above, with bucranium between two pellets and a ring ornament; below a ring and a crook-shaped ornament.

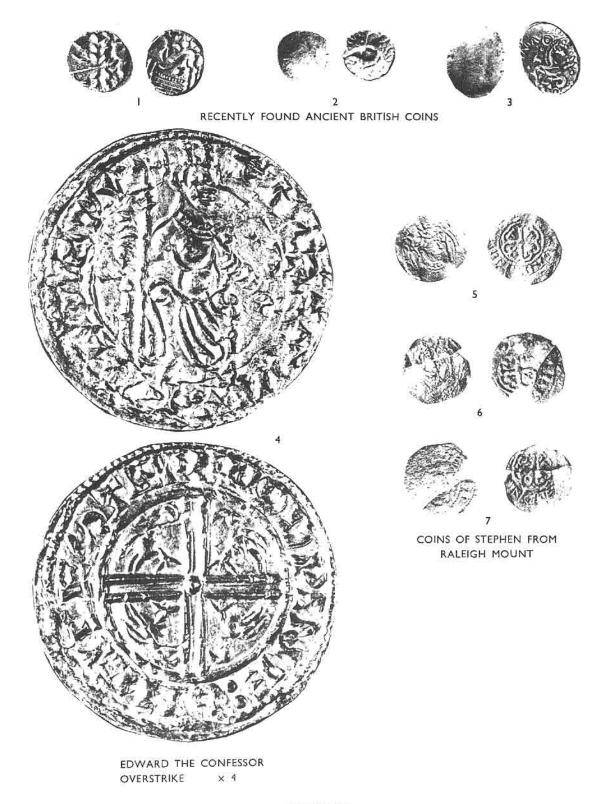
Weight: 84 grains.

Mack reference: 282.

Pl. IX. 3.

These coins are all in the H. R. Mossop collection.

H. R. MOSSOP



#### A NEW TYPE FOR OFFA

THOUGH there is good reason to believe that we still have much to learn about Offa's coinage, the appearance of a new type by a hitherto unrecorded moneyer is something exceptional. It is therefore with a very real sense of gratitude that we acknowledge the courtesy of the Royal Coin Cabinet of The Hague and of the Dutch State Service for Archaeological Excavations in allowing us to record the coin here and we are particularly indebted to the Director of the latter, Dr. W. A.

placed vertically. The whole is contained within a linear circle.

Rev.: A runic inscription which is discussed below. Design generally similar to the obverse, but there are no sides to the centre panel. One bar of the 'D' is continued, top and bottom, to join a linear circle which contains the design.

Weight: 1.17 grammes; 18.1 grains.

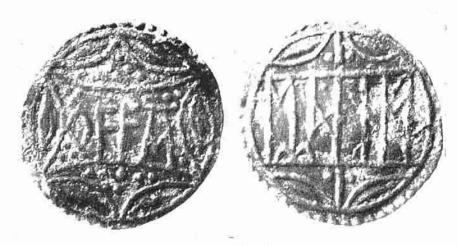


Fig. 1 (enlarged).

Van Es, and to Mr. R. I. Page, of Cambridge, who has carefully studied the runic inscription and given us the benefit of his views on it.

The coin was found on 26 March 1968, in excavations being carried out by the State Service at Wijk bij Duurstede (the ancient Dorestad). It was unearthed in a disturbed layer in level 3 of trench 26, and nothing was found in association with it. It remains at present in the hands of the State Service.

The coin may be described as follows:

Obv.: Legend offa, the o lozenge-shaped, the A chevron-barred. The name is set in a concave panel with three pellets in each corner. Above and below are two arches of a similarly curved tressure with pellets inside. Either side of the panel is what appears to be a leaf The runic inscription is not entirely clear. Mr. Page would be inclined to read it Ednod, but is puzzled by the two seemingly quite deliberate hooks at the foot of the first letter. These are abnormal and their significance is not clear. However, the rune for the diphthong ea in Old English is \(^{\mathbf{M}}\) and it is just possible that the first element in the name might be intended to combine e (M) with ea \(^{\mathbf{M}}\)), the latter inverted. This would produce the name Eadno\(^{\mathbf{M}}\).

The absence of the royal title on the obverse will be noted. This, though exceptional on Offa's coins, is occasionally found.<sup>2</sup>

The possibility that the coin might be a continental imitation of a coin of Offa's was first considered, but was rejected on two grounds. First there is no known prototype, for obverse

<sup>&</sup>lt;sup>1</sup> See Anglo-Saxon Coins (1961), p. 46.

<sup>&</sup>lt;sup>2</sup> e.g. on Nos. 7, 30, 38, 46, and 48 illustrated in Anglo-Saxon Coins (1961), Pls. IV and V.

or reverse, from which it could have been copied (not, however, a conclusive argument, because, as already explained, our knowledge of Offa's coinage is manifestly incomplete); the second, that the letter ⋈ is of a type much more common in England than outside it.

unknown King Eadwald, who may have occupied the East Anglian throne for a short period after Offa's death.<sup>2</sup>

Only one other moneyer is known to have worked for this king and his name is Eadnoö. Two (or possibly three) of his coins have survived.<sup>3</sup>



Fig. 2.

If it is English, the runic inscription associates it with the coins which are attributed to East Anglia.<sup>1</sup>

Of the five moneyers who, it has been suggested, worked for Offa in an East Anglian mint, the names of two, Lul and Wihtred, are found also in coins struck in the name of a historically

The new coin from Holland thus fits very neatly into the East Anglian group of Offa's coins and the fact that the obverse is not of the 'three-line' type suggests that it is not of his latest issue, introduced some four years before his death.

C. E. BLUNT and G. VAN DER MEER

# THE 1912 WELWYN FIND OF PENCE OF EADGAR AND OF EDWARD THE MARTYR

In 1961 it was observed that there appears to be no published find from southern England including coins of Eadgar (A/S Coins, p. 141 and map opposite p. 142). It was also claimed that Eadgar's Three-line type (BMC ii = Brooke 1 var. = North 757 = Seaby 652), which is associated with Chester in particular, is one that belongs comparatively late in the reign. Both topics had also been touched upon in a note commemorating the millennium of Eadgar's accession (SNC 1959, p. 76), and the late (post-973?) date of the Threeline type was further postulated in a paper discussing the Dalkey hoard (JRSAI xci (1961), pp. 1-18). Recently, however, a London salecatalogue (Sotheby, 19 February 1969, English, Scottish, and Foreign-confusingly there had been earlier the same day and in the same rooms

a Roman sale) included in an unusually full description of lot 145 a reference to an unpublished coin in the British Museum to which attached the provenance 'ex Wellwyn [sic] Treasure Trove, 1913 [sic]'. No hoard of this name is listed in Mr. Thompson's Inventory (1956) or is cited in my own review of Viking-age hoard-evidence from these islands on pp. 47–54 of SCBI B.M. H/N (1966), but through the courtesy of Mr. R. A. G. Carson, F.S.A., of the British Museum, it is possible for there to be offered here a partial reconstruction of a little find which seems not without significance where students of the tenth-century English coinage are concerned.

The British Museum coin (registration No. 1913–3–10) is a *Three-line* penny of Eadgar from the Chester mint and by the moneyer Aldewine.

Grantley coin, but since the latter has a pedigree going back at least to the Dymock sale of 1858, and is presumably the specimen described by Haigh in his Numismatic History of the . . . East Angles (1845), p. 6, as recently discovered, this seems unlikely. If in fact it is a third specimen, its present whereabouts are unknown.

<sup>1</sup> Ibid., pp. 49-50 and 59,

<sup>&</sup>lt;sup>2</sup> Ibid., p. 50.

<sup>&</sup>lt;sup>3</sup> BMC i, p. 84, 3; Grantley 881; Grueber in NC 1894, p. 54 n., in his account of the Middle Temple hoard, writes that he had 'very recently seen a coin of Eadwald, a duplicate of that in the Museum (B.M. Cat., vol. i., Pl. XIV. 3) which I strongly suspect came from the same hoard'. This could, of course, be the

It is the only coin from the find which was acquired by the English national collection. From certain treasure trove files which survived the 1941 bombing of the Coin Room it emerges that the find consisted of no more than four coins —unless indeed there were other pieces that were not recovered-which came to light in the course of roadworks where the Great North Road passes through Welwyn. The date of discovery was August 1912, but the coins were some weeks in reaching the coroner as they had been acquired by a local resident, and the treasure trove aspect was not realized until he chanced to submit them to the British Museum for identification in the course of the autumn. Unfortunately the descriptions of the remaining three coins are tantalizingly incomplete—one must assume that a fuller record was made for a publication of the find which in the event never appeared owing to the outbreak of the Great War. All we are told is that one was of Eadgar and of the Chester mint; one, broken in three pieces, of Edward the Martyr and of the Winchester mint; and the third so chipped around the edges that no attribution was possible beyond the guess that it was of Eadgar. Inasmuch as a fairly rigorous demonetization does appear to have accompanied Eadgar's reform of c. 973, it is probably safe to say that the Chester coin of Eadgar not acquired by the British Museum was a second example of the Three-line issue or of Reform type (BMC vi = Brooke 6 = North)752 = Seaby 662). Since, too, the coin is not described as broken, it may be thought unlikely that it was the latter—to this day there is no Reform coin of Chester for Eadgar in the British Museum trays. It is unlikely, too, that the Welwyn provenance can attach to Locket 2754, apparently the only Chester penny of Reform type to have passed through the saleroom without a pedigree that is inconsistent with discovery as late as 1912. In contrast, Chester coins of Threeline type are not all that rare, and as early as 1893 there were a dozen specimens by nine different moneyers in the British Museum trays. That the Edward the Martyr penny of Winchester should be described as broken in three pieces could be significant. Normally one would have assumed that its non-acquisition by the British Museum implied duplication of a coin already in the national collection, but there is some evidence that at this period broken coins were generally eschewed. It would be unwise, therefore, to press the argument too hard by the supposition that the coin must have been by either of the Winchester moneyers then represented in the Museum trays,

Wihtsige and Wynsige (BMC 35 and 36). There remains the question of the coin only doubtfully of Eadgar. That reign and mint alike were rendered ambiguous by damage must suggest that it had a reverse of circumscription type, in other words that if of Eadgar it was either a true Circumscription coin (BMC iii and iv = Brooke 4 = North 748, 749, 758, and 759 = Seaby 654-7) or a Portrait coin from before or after the reform (BMC v and vi = Brooke 5 and 6 = North 750,751, and 752 = Seaby 658-60). If a Circumscription coin, however, any ambiguity would have been as to whether it was of Eadwig or of Eadgar, and one might have expected Brooke to have come down strongly in favour of the latter. As a recent paper (NC 1962, pp. 195-202) has demonstrated, in 1912 Circumscription coins of Eadwig were still so quite exceptionally rare that it is doubtful if three at the very most were known to English numismatists. If a Portrait coin, on the other hand, ambiguity would be twofold. If the bust broke the inner circle, confusion could only be with Eadwig, a highly improbable ambiguity inasmuch as then as now any Portrait coinage of the earlier king is represented by a unique survivor, SCBI Hunter 675. All this would seem to preclude the possibility of the Welwyn find including Circumscription and pre-Reform Portrait coins, always an improbability inasmuch as the demonetization of c. 973 does appear to have been very thoroughly executed. In contrast, the outstanding ambiguity, the possibility of confusion between a post-Reform Portrait coin of Eadgar and one of Edward the Martyr, has much to commend it. The two series did circulate side by side—they were, after all, part of the same issue —and even today, when so much more is known about them as a result of the 1914 Chester hoard (Inventory 85) and of work on the Swedish material, the regnal attribution of chipped coins of the issue can often present very considerable difficulty. On balance, then, the probability must be that the fourth coin in the Welwyn find was a Reform penny of Eadgar (BMC vi = Brooke 6 = North 752 = Seaby 660), with the possibility that it was one of Edward the Martyr (BMC i = Brooke 1 = North 763 = Seaby 662).

As already remarked, only one of the above four coins came to the English national collection. The fate of the others is uncertain. The file shows that it was the mind of H.M. Treasury to put them into the London saleroom, and it further emerges that there was a specific proposition that they be included in the same sale as the 210 pennies of Henry III which the Museum did not

take from the 1912 Steppingly hoard (Inventory 342). The latter did in fact figure in the Reynolds sale (Sotheby, 4 May 1914, lots 117-19) along with two gold coins of Charles II and William III from a treasure trove in the Channel Islands (ibid., lots 120 and 121) which appears to be unpublished at least where numismatic journals are concerned. A check through other sale-catalogues of the period has been unproductive, and the probability must be that in the event the Treasury fell in with (Sir) George Hill's representations that heed should be given to the claims of Mr. Davis, the Welwyn resident who had brought the coins to the Museum's notice. It is possible that the coins are in the possession of a member of the family to this day, but the condition of the obvious rarity, the Edward the Martyr of Winchester mint, must mean that if since disposed of it is unlikely in the extreme that Mr. Davis or an heir was ever able to secure for the coins separate lotting in any sale.

Reduced to modified *Inventory* format, then, a summary of the 1912 Welwyn Find might run something as follows:

WELWYN (Gt. North Rd.), Hertfordshire, August 1912.

4 AR Anglo-Saxon pennies. Deposit:  $c.978 \pm 2$  (?).

KINGS OF ENGLAND: Eadgar, BMC (A) type ii —Chester, Aldewine, 1; BMC (A) type ii ?, Chester, moneyer not recorded, 1. Eadgar, BMC

(A) type vi (or Edward the Martyr, BMC (A) type i?)—uncertain mint and moneyer, 1. Edward the Martyr, BMC (A) type i—Winchester, moneyer not recorded, 1.

The coins came to light in the course of roadworks. There is no mention of any container, One coin is in the British Museum.

M. Dolley, BNJ xxxviii (1969), pp. 183-5.

The find may be small, but it is none the less critical. For the first time we are given a find which contains Three-line coins of Eadgar beside Portrait coins struck in the years immediately following the recoinage of c. 973 and as such it may be thought a not unwelcome crumb of evidence in support of the hypothesis that the Three-line pence represent a special coinage to meet the requirements of Irish Sea trade struck in the years immediately following Eadgar's reform and perhaps even continuing for a short while after his death. This seems also to be the first time that Three-line coins of Eadgar have been found in England, and equally the first time that there has been an Eadgar element in a hoard from south and east of a line from the Severn to the Wash, but the historian will not be surprised that the hoard must be dated after Eadgar's death. It remains true that the reign of Eadgar the Peaceful was a time when the greater part of England basked in a security the envy of following generations.

MICHAEL DOLLEY

### AN OVERSTRUCK PENNY OF EDWARD THE CONFESSOR

OVERSTRUCK coins of Edward the Confessor are of sufficiently rare occurrence to warrant recording a specimen in my collection (Pl. 1X. 4) which came from the Grantley sale, lot 1207, ex L. A. Lawrence, ex W. Allen sale (1898), lot 260. It is a coin of Chichester of *BMC* type ix (sovereign type) by the moneyer Godwine and is from the same dies as *BMC* 120.

That the coin is an overstrike is apparent, and closer examination discloses that the coin over which it is struck, obverse on reverse, is of the preceding type (BMC vii, pointed helmet). There are traces of the moneyer's name, which may be Ælfwine, and of the mint which appears to end -CEST. This could be either Winchester or Chi-

chester, at both of which an Ælfwine is known in the type, but the spacing suggests that the latter, which would have one letter less than Winchester before -CEST, is the more likely.

Major Carlyon-Britton published in 1905 another Chichester overstrike of the same types and actually from the same obverse die as the coin under review. Another, this time of the Wallingford mint, is in the Ashmolean Museum at Oxford.

I am much indebted to Miss M. M. Archibald and to Mr. Elmore Jones for examining my coin and for their advice, on which much of this note is based.

P. A. HODGKINSON

#### A FIND OF STEPHEN COINS AT RAYLEIGH MOUNT

FOR many years there has been on view in the museum at Prittlewell Priory, Southend-on-Sea, Essex, a parcel of pennies of the reign of Stephen. Until recently the coins, all of which are of the 'Watford' type (*BMC* i), were displayed in a pile together with a label on which the words 'Pennies of King Stephen, 1135–1154' appeared in faded ink. The coins have now been examined and prove to be a small hoard not previously published.

Eight pieces came into the possession of the museum shortly after being found at Rayleigh Mount, the site of Rayleigh Castle, in excavations conducted by E. B. Francis between autumn of 1909 and September 1910, when a report on the excavations was read (*Transactions of the Essex Archaeological Society*, new series, xii (1913), 147–85). This report, however, mentions only seven, possibly counting Nos. 5 and 6, below, as fragments of one coin. Some time later they were stolen and one was missing when the parcel was recovered. Further excavations in 1961, as yet unpublished, directed by Mr. L. Helliwell, curator of the museum, produced another 'Watford' penny.

The following is a complete list:

- 1. London mint, moneyer Dereman (Pl. IX. 5).

  Obv.: +STIEFNE R (with inner circle).

  Rev.: (----) MAN: ON: L (--) 21.9 grains.

  Neither obverse nor reverse dies are duplicates of BMC No. 63.
- 2. York mint, moneyer Laising?

  Obv.: +s (TIEF) NE R (E) (with inner circle).

Rev.: +(LAISIG: ON: EV ?) ERPI Broken, 21.3 grains.

A die duplicate of the coin in British Museum collection from the South Kyme find.<sup>1</sup>

 Canterbury or Colchester mint? moneyer Edward.

Obv.: +STIEFN (- - -) (with inner circle).

Rev.: (+) EDPAR (----) Broken, piece missing.

Neither obverse nor reverse dies recorded at British Museum.

 Canterbury or London mint? moneyer Wulfwine? (Pl. IX. 6)

1 No. 267, NC 1922, ii, p. 79.

Obv.: (+ST) EF (N) E: (with inner circle).

Rev.: (+P) VLF (--) N (-----) Broken, part of rim missing.

Neither obverse nor reverse dies recorded at British Museum.

5. Fragment Mint? Moneyer?

Obv.: +ST - - -.
Rev.: (D?) BER

About one quarter of coin only.

6. Cut farthing Mint? Moneyer?

Obv.: Illegible.

Rev.: ON: - - -.

Weight: 4.9 grains.

7. Local dies Mint? Moneyer? (Pl. IX. 7).

Obv.: (----) NE (with inner circle).

Rev.: (- - - -) (L?) T: ON /.

Very small piece missing, 15.0 grains. Tall, thin letters on reverse, no colon between on and initial letter of mint name.

8. Stolen coin

According to museum records the eighth coin was by the moneyer Wulfwold of the Southwark mint. (Cf. BMC 95-7.)

All the above coins were found in 1909 or 1910.

9. London mint?

The coin excavated in 1961 is very badly corroded but appears to be the product of the moneyer Estmund of London.

That the first eight coins are part or whole of a hoard may be assumed; the seven pennies now remaining all have similar patination. They are brittle and very black. The find has two important features. It is the first recorded hoard of the reign of Stephen buried in Essex and it is possible that none has been found in East Anglia either.<sup>2</sup> It is also one of the rare occasions on which an irregular coin (No. 7) has been found with specimens of *BMC* type i of Stephen only. The irregular penny has a small piece of the rim missing after the word 'on' and, although the first letter of the mint town appears to be a it is not possible to allocate the name of a known mint commencing with this letter. Moneyers recorded as having

in Norfolk see report in BNJ xxxvii (1968), pp. 41-2 by C. E. Blunt and F. Elmore Jones.

<sup>&</sup>lt;sup>2</sup> For another find which may have been discovered

struck the 'Watford' type pennies and whose names end with 'T' are:

Gilbert (Bury St. Edmunds, Gloucester), Ravenswert (Chester, Shrewsbury), Robert (Canterbury, Hastings, London, Shrewsbury), Saiet (Winchester), Wibert (Gloucester).

Historical and Archaeological Background (by S. E. Rigold)

Rayleigh Mount now appears as a large motteand-bailey complex, comprising a 50-foot-high motte, at the north-west, and a compact inner bailey, forming a fairly level platform without an inner bank, both of which are within a wide ditch with a counterscarp-bank; and, finally, a lightly banked outer bailey. The castle existed by 1086, but not in its present form. Domesday records that in hoc manerio (sc. the largest of the four in Rayleigh) Suenus fecit suum castellum. Sweyn was the son of Robert fitz-Wimarc, a Norman settler under the Confessor; father of Robert, the founder of Prittlewell Priory, and grandfather of Henry 'of Essex', the Constable who forfeited all his hereditary tenures in 1163, having lost a wager of battle on a, possibly unjust, imputation of cowardice cast by Robert de Montfort who sought his lands and offices. Very properly, Henry II kept the lands for himself. Rayleigh remained in Crown hands until granted to Hubert de Burgh in 1215.

Henry of Essex had been generally loyal to Stephen, but enjoyed royal favour in the early years of Henry II. His proximity to the ambitious and unstable Geoffey de Mandeville is enough to make it tolerably certain that he took advantage of the conditions of anarchy to transform the castle of Rayleigh, which was his principal seat, into something like its present shape and Mr. Helliwell's excavations appear to confirm the view that the motte was heightened, if not, indeed, altered from a ring-work, at that period, and the surface of the bailey raised and perhaps extended. These excavations show two phases of intensive occupation during the late thirteenth and early fourteenth centuries. The documentation, however, suggests that this was non-military and that Rayleigh, though maintained as a castle under Henry II, had reverted to pastoral (horserearing?) use by 1277. The penny found in 1961 may have been disturbed, as the post-hole where it was found adjoined another post-hole containing thirteenth-century material, but this does not imply that those found in 1909-10 had been disturbed.

The report on the excavations of 1909-10,1 accompanied by an extremely schematic plan, shows that:

- (i) on the slope of the motte, an area to the north-east was stripped and two middens on the south-east emptied, one penetrating an earlier stratum containing stone-work;
- (ii) much of the inner bailey was stripped of one to two feet of featureless topsoil, revealing an occupation-level with floors and wall footings, and the foundations of a stone-reinforced rampart, if not a curtain-wall;
- (iii) only in one place was this occupation-layer breached (position XIX on the published plan, near the ditch separating the bailey from the motte), to reveal a waterlogged timber structure of great interest and apparently excavated with some care and neatness in the circumstances, over six feet below the occupation-layer.

Without prejudice to the interpretation of Mr. Helliwell's excavations in 1959-61, the complexion of the finds from the occupation-level suggests a fairly continuous use, with minor modifications, from the mid-twelfth century to quite late in the thirteenth, i.e. from the alterations by Henry of Essex to beyond the effective abandonment of the castle as such. The floors and footings are perhaps mainly from the late thirteenth- to early fourteenth-century occupation.

However, certain pottery, of which both sections and photographs are published and which is quite acceptable in the second quarter of the twelfth century, is described as 'found at a depth of 6 feet or more in that part of the bailey where the coins of Stephen were found'. This can only imply the excavation for the timber structure, at position XIX. The blackened condition of the coins fits the waterlogged surroundings. The association is complete; the hoard was undisturbed and buried by the alterations, including the raising of the bailey area by over six feet, that on historical grounds alone would fit best in the early 1140s.

The writer wishes to acknowledge, with considerable gratitude, the assistance received from

<sup>1</sup> Trans. Essex Arch. Soc. new series, xii (1913), 147-85.

Mr. D. G. Macleod, M.A., Dip.Anth., F.R.A.I., Assistant-in-Charge of Priory Museum, Prittlewell, and also from Mr. S. E. Rigold, M.A., F.S.A.

This note is concluded with a summary of the Rayleigh find in *Inventory* format:

RAYLEIGH, Essex, 1909/10 and 1961. 9 & English pennies. Deposit c. 1140.

Stephen BMC (N) type I—London: Dereman, 1. Southwark: Wulfwold, 1. York: Laising?, 1.

Disp on-S

uncertain mints: Canterbury or Colchester?. Edward, 1; Canterbury or London?, Wulfwine?, 1; London?, Estmund?, 1; (local dies), 1; fragment, 1; cut farthing, 1.

Disposition: Prittlewell Priory Museum, Southendon-Sea, Essex. The coins were stolen from the museum some years ago but, with the exception of the Southwark specimen, all were recovered.

ROBERT SEAMAN

#### THE SHORT CROSS COINS IN THE RAS SHAMRA HOARD OF 1966

THE castle of Ras Shamra, about 12 km, north of Latakia in Syria, is best known as the site where the Ugaritic tablets were discovered. The excavations there have also vielded an important hoard of archaic Greek staters.1 and, more recently, a large hoard from the period of the Crusades, This comprised 251 coins of Lucca, 58 of Valence, 180 of Antioch, and 8 miscellaneous French and Crusading coins (all of which have been catalogued and discussed elsewhere).2 together with 52 English Short Cross pennies. The latest coins in the hoard were a 'helmet' denier of Antioch of D. F. Allen's Type 6 (c. 1230 or later),3 and two worn deniers of Henri I of Cyprus (1218-53). The hoard's age-structure is, however, complex. It includes, for example, a block of coins of the 'bare head' type issued at Antioch in the 1150s, and another group of the 'helmet' type from the 1160s and 1170s, which were not much worn. The English coins likewise are uncharacteristic for the date at which the hoard was concealed. Many of them seem to be in an unusually poor state of preservation. The latest are two of class VII, of which one is by the moneyer Elis (therefore after c. 1221),4 but the majority are of class V (1205-10) and early class VI. As class VI is under-represented, one cannot suppose that the whole sum was withdrawn from circulation in England during the currency of class VII. Fortunately we can be confident that the hoard was recovered substantially intact. It passed into the hands of Dr. P. Z. Bedoukian, who 'rescued' it from oblivion by making aluminium foil impressions of the coins before they were dispersed. He very generously made the impressions available for study. Many of the English coins, as has been said, were in poor condition. The better ones were photographed, and Mr. J. D. Brand kindly gave these his expert scrutiny, and corrected or improved a number of the attributions. The coins may be listed as follows:

LOND	ON	
1.	Abel	Vc
2-3.	Abel	Vc?
4. 5.	Abel	Vlai
5.	Abel	VIb
6. 7.	Andreu	Vc
7.	Beneit	Vbi
8.	Elis	VII
9.	Fulke	Vbi
10.	Ilger	Vc
11.	Ilger	Vb or VI
12.	Rauf	Vc
13.	Rauf	Vb or VI
14.	Rauf	Vlai
CANT	ERBURY	
28.	Goldwine	Va
29.	Iohan	Vlbii
30.	Iohan?	?
31.	Iun	VII
32.	Roberd	Vb

<sup>&</sup>lt;sup>1</sup> C. M. Kraay, Greek Coins and History, Some Current Problems, 1969, pp. 44 f.

<sup>&</sup>lt;sup>2</sup> In Hamburger Beiträge zur Numismatik, 1969/70.

15.	Raul	Ic?
16.	Raulf	VIb
17.	Ricard	Va
18-19.	Walter	Vb
20.	Walter	Vc
21.	Walter	VIa
22.	Willelm B	Vb
23.	Willelm L	Vbii
24.	Willelm T	Vb
25.	Willelm T	Vc
26.	Uncertain	Vb
27.	Uncertain	Vc
33.	Samuel	Vb
34.	Samuel	Vbi
35.	Tomas	Vb
36.	Walter	Vic

<sup>&</sup>lt;sup>3</sup> D. F. Allen, 'Coins of Antioch, etc., from Al-Mina', NC (1937), pp. 200-10.

<sup>4</sup> See BNJ xxxiii, p. 66.

CHICHESTER

37. Willelm Vbii

EXETER

38. Asketil early 1b 39. Iohan Vbii

KING'S LYNN

40. Iohan Vbii (Obv. legend henrious ·/Rex)

Norwich

41. Renaud Vb(ii?)

WINCHESTER

42. Gocelm? Ib 44. Rauf Vb 43. Ricard Va 45. Rauf V

The remaining coins were too obscure to be identified.

D. M. METCALF

#### A NEW GROAT OF RICHARD II





Fig. 1 (enlarged).

I WOULD like to record a groat of class IV<sub>3</sub>/<sub>5</sub>, recognized by the crescent on the breast from new dies which has recently come to light.

 $Rev.: = + posvi devm_a^* a divtor em_m^* mev$ 

Weight: 69-1 grains.

Mr. Potter in his paper on the coinage of Richard II in this *Journal* located four specimens using two obverse and four reverse dies. Both obverse dies read DI whereas this one reads DEI. On the reverse die, stops, etc., are as Potter 4; however, the distinguishing feature is that the R is double cut.

J. ATKINSON

## NEW EVIDENCE CONCERNING THE AUTHENTICITY OF THE 1655 HALF-CROWN





(obverse) (reverse) Fig. 1. 1655 Half-crown (coin e) (enlarged).

RECENT discovery of what had the appearance of a genuine 1655 half-crown prompted me to try to reach a definite conclusion concerning its authenticity. Over the last 130 years, several attempts have been made either to maintain or to refute the authenticity of different specimens that have gradually come to light. While at times providing useful information, no theory as yet advanced seems to be really satisfactory, mainly because rarely were all the known specimens at the time of writing taken into account.

There are in the British Museum at present four half-crowns dated 1655:

Weight	Condition	Ticket
(a) 223·8 g.	F	1935 Clark-Thornhi bequest
(b) 221·3 g.	VF (clipped)	1896 Montagu
(c) 212.6 g.	F (tooled)	None
(d) 282·0 g.	VF (tooled)	1839 Cureton

in addition to the one now in my own collection:

(e) 222.8 g. F None

It is abundantly clear that coins c and d are forgeries, since on the former the tooling has revealed a non-silver core plated with silver, and the latter may be condemned by its enormous weight alone, but its style too is extremely dubious. According to the records, the British Museum purchased a 1655 half-crown from Cureton in 1839, which was the only specimen there when Montagu attempted to show in 1884 that his own coin, bought from Wigan, was the only genuine known 1655 half-crown. He referred to the Museum's coin as one of Stapley's (see below) forgeries 'of base metal covered with silver plating', and Hawkins also condemned it.

The three other specimens, however, demand more scrutiny. Strangely enough, Samuel Spink disputed the authenticity of Montagu's specimen, asserting that all the experts of his day considered it to be merely plated. Judging by the appearance of the coin labelled Montagu, this seems highly unlikely, so that Spink was either mistakenwhich seems doubtful-or somehow the label has been displaced. In the same article Spink claims authenticity for his own newly acquired specimen, about which he writes: 'More than its weight, its thoroughly genuine appearance and ring convince me that here at last is found at any rate one genuine halfcrown of the year 1655.' One might tentatively guess that this, if not subsequently indefinitely lost, is coin e, which is the nearest of the above coins to it in weight, for Spink weighed his at 222 g.—which may not be too accurate in view of the date of weighing.

Coins a and b seem to be from the same obverse die, in so far as one can see from the worn



Fig. 1. 1655 Half-crowns, a-b (enlarged).

condition of the former, while it is impossible to be certain about the reverse (date side). Coin e is made from different dies. Nevertheless several of the letter punches are the same on all three coins.

- (A) The v of vs on the reverse is missing part of the first horizontal bar (fig. 2).
- (B) On coins b and e the w of WITH on the reverse has a short right bar and the central apex has a flaw giving the effect of a third bar. This probably applies also to coin a, which is too worn to be judged, as in all seeable aspects its reverse is as b's (fig. 3).
  - (c) On the obverse and reverse of coin a, on the

reverse of coin e, and possibly on the reverse of coin b, where there is a misstrike, the upper and lower vertical bars of the G sometimes form a continuous line, the lower being thicker than the upper and rounded at the top left-hand corner (fig. 4).

Not only are there common punches on the dies of the three half-crowns of 1655, but one may also find punch-links with some half-crowns of 1654 and 1656—e.g.:

(1) Punch A is found on a 1654 half-crown reverse (own coll.) (fig. 5) and on a 1654 obverse (B.M.).<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> The flaw is stronger on 1655 coins than on those of 1654.

- (2) Punch B is found on two 1654 reverses (B.M. and own coll.) (fig. 5).
- (3) Punch C is found on two 1656 obverses (B.M. and own coll.) (fig. 6), and one 1656 reverse (B.M.).

coming may possibly be overcome. It would be wrong to ignore weight in this case since all three 1655 half-crowns are of very low weight, whereas those of other dates show a large variation of weights. While the eighteen half-crowns of 1653,

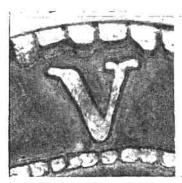






Fig. 2. Punch A.

Fig. 3. Punch B.

Fig. 4. Punch C.

There are in all probability even more punch links between half-crowns of 1655 and those of other dates, but the above are the most obvious, primarily because the punches are slightly out of the ordinary.

The implication behind these observations is that the coins are genuine—or at least struck from official dies. There is, however, the problem of weight. As Spink points out, the weight of 1654, and 1656 that I weighed all fell between 224·1 g. and 234·9 g. (exceptionally heavy specimen); those of 1655 are all outside this range. Since two of the three specimens look unclipped, this low weight cannot be explained by clipping.

If, however, these half-crowns were forged, it would be hard to understand why, since such a venture can hardly have been very profitable—even if the forger had free access to silver. Bear-



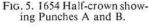




Fig. 6. 1656 Half-crown showing Punch C.

coins of the Commonwealth is a poor guide to authenticity, as one finds well-worn coins weighing more than unclipped well-preserved ones. Nevertheless, if a large sample is used, this short-

<sup>1</sup> I weighed a small sample of half-crowns and shillings of 1653-5, and each denomination showed a similar annual percentage reduction in the amount of silver used for it in each year from 1653 to 1655.

ing in mind the penalties of the day for forging coins of the Commonwealth, one wonders whether such a small profit for such a large outlay would have been worth while in relation to the

While inconclusive because of the small sample of coins used, the implication is that there was a deliberate—either official or otherwise—reduction in the amount of silver used in coins during these years.

risk involved. Indeed, if they were forged, they were done with at least some official letter punches which must have been removed from the Mint. It seems strange too that a forger would have produced at least two obverse and two reverse dies unless they were wholly made officially at the Mint and later removed, no coins having been officially made from them. On the whole then the above arguments weigh against the 1655 halfcrown's being a forgery.

Before concluding, however, it is perhaps worth mentioning an advertisement in the Publick Intelligencer of 22 to 29 October 1655 by one Richard Pight, 'Surveyor of the Melting-house in his Highnesse Mint', which runs as follows: 'This Abraham Stapley is a false Coiner of Money, for, in his house at Deptford were found several false Coining Irons for half crowns, and false half crowns, coined with the date 1655, and this is to give notice to all persons whatsoever, that shall receive any of the said money of Stapleys. dated 1655, there being none of that date in his Highness Mint coined to this day the 26, of October.' From this statement and from the fact that he had searched in vain in all the most prominent cabinets of his day, Sir Henry Ellis concluded that no genuine 1655 half-crown could exist. Hawkins followed suit. As, however, Spink

pointed out when trying to authenticate his own specimen, there was still time after October for coins to have been minted. There is in fact no record at the Mint of a man named Stapley having worked there, hence having been able to remove dies or punches. Mint records of this period, however, are very incomplete.

To sum up then, this paper set out to survey the literature about the 1655 half-crown and to try to explain the consistently low weight of these coins. Much of the literature has been concerned with what are clearly forgeries. Some has been concerned with one specimen alone, so that the importance of seeing the 1655 half-crown in the context of the whole series of which it is a part has been overlooked. The evidence of the punches, and of the weights, looked at in relation to other dates and-in the latter case-denominations, seems a very good indication of authenticity.

#### References

1655 Publick Intelligencer, Oct. 22-9 (p. 57). 1836 Numismatic Journal (p. 274).

1876 Hawkins: Silver Coinage of England.

1884 Numismatic Chronicle (pp. 201-2).

1902 Spink's Numismatic Circular (column 5123).

DAVID S. FREEDMAN

#### THE GOLD FORTY-SHILLING PIECE OF JAMES VI OF SCOTLAND

AT the Scottish mint the warden and counterwarden maintained a register in duplicate recording the particulars of the species and quantity of coins struck. These registers are extant principally for the periods 1590 to 1634 (with some gaps) and 1664 to 1681. One of them has two pages which contain details of the amount of gold coin minted during the period 10 November 1591 to 1 November 1592.1 The first page is headed:

The register of the four pund and fourtie schillingis peces of gold of the fynes of xxij carrettis, conforme to the ordinance.

There follows a list of sixteen journeys for each of which there is given the date of the journey and the amount of gold coined. At the end of the second page there has been written in a different hand: 'Summa of the haill gold of four lib. and fourtie s. peces of gold fra the tent day of nouember 1591 inclusiue To the first day of nouember 1592 inclusive extendis to Thrie stane sex pund xiiii vnces.'

The four-pound piece, which was struck during each of the years 1591-2-3, is better known today as the hat piece, a name by which it became known soon after its issue. The obverse has a portrait of James VI wearing a remarkable highcrowned hat. The reverse is a lion sejant holding a sceptre, and a cloud above with Jehovah in Hebrew; the legend is TE SOLUM VEREOR (Thee alone do I fear).

A coinage of gold four-pound, and forty-shilling pieces, as well as silver half-merk, and fortypenny pieces, had been ordered by the Scottish Parliament on 6 August 1591.2 The Act stated that the gold coins were 'to have cours for four pundis the pece with halffis accordinglie'. Taken together, the evidence of the Act and the warden's register seems conclusive that both hat pieces and their halves were struck, even though none of

Scottish Record Office, E 102/2.

<sup>&</sup>lt;sup>2</sup> R. W. Cochran-Patrick, Records of the Coinage of Scotland, i, pp. 117-19. 0

the smaller denomination is known today. It is only when one delves more deeply into the records for additional information about these coins that doubts and difficulties begin to arise.

An important source of information for the student of the Scottish coinage is *The compt of the coynzehous*.<sup>2</sup> This manuscript volume covers the period 1582 to 1627 and contains a record of the receipts and expenditure at the mint and the amount of gold, silver, and billon coined. There are many references in it to the gold and silver issues of 1591–3. During the accounting period from 1 September 1590 to 1 November 1592 there occurs the entry (folio 22):

Item, past the irnis in foure pound peces of gold in the said space of the fynnes of xxij carrettis according to the said vmquhile [late] wardanis buikis Thrie stane sex pound fourtene vnce wecht.

This entry corresponds to the one in the warden's register which has already been quoted, but with this difference, that the *compt* does not mention the forty-shilling piece. Such omissions do not occur when references are made to the silver coins, for we find such entries as: 'past the irnis in half merkis and fourttie penny peces of siluer . . .' (fol. 22 verso).

On another page of the *compt* we find the entry (fol. 23 *verso*):

Item payeit to Thomas foulis, sincker, ffor saincking of thrie pair of Irnis viz. ane for four pound peces of gold, ane for half merk peces and ane uther for fourttie penny peces of siluer, ilk ane fourttie pundis, conforme to his acquittance Is je xx<sup>IIb</sup>.

£40 was the standard amount paid to the diesinker as his ordinary due at any alteration of the coin or renewing any puncheons. In the case of a new coinage it appears that he received £40 for each denomination. The item quoted above was the only payment of this kind to be made to the die-sinker for the coinage of 1591–3. Had he made puncheons for a gold forty-shilling piece, he

¹ Compare the position during Charles I's reign, when the number of Britain crowns and half-crowns struck in Scotland during the period of the first coinage would surely have been entitled to a further £40 for making them.

Still another reference to the coinage is the following (fol. 24): 'Item, gevin to my Lord Chancellar ane pece of ilk sort Is iiij<sup>lib</sup> x s.'

The Lord Chancellor was one of several officials whose perquisite it was to receive one piece of each denomination whenever there was a new coinage. The amount of £4. 10s. is the sum of the gold four-pound piece and the silver half-merk, and forty-penny pieces, and this once again seems to confirm that only one species of gold coin was struck.

Although there are numerous references to four-pound pieces in the *compt*, the forty-shilling piece is nowhere mentioned. The total weight of 22-carat gold coined during 1591–3 in four-pound pieces is given as 14 stone, 12 pounds, and  $2\frac{1}{2}$  ounces. There were  $6\frac{3}{4}$  of them to the ounce, so if the entire amount was coined in the larger denomination the number of hat pieces struck was almost exactly 25,500.

It must be very rare to have apparently sound documentary evidence both for the existence and non-existence of a particular coin, and this emphasizes the need for caution when consulting contemporary records. It did happen from time to time that the Scottish authorities decided on a certain coin or coinage, then minds were changed and a different coinage was issued. In the present instance it seems possible that, on learning of Parliament's intention to have two gold denominations, the warden entered their names on the first page of his register. Shortly afterwards, orders may have been given cancelling the smaller species and so none was struck. When the bottom of the second page of the register had been reached the warden died (vide the compt, fol. 22) and the second writer simply copied the denominations shown at the top of the first page. The writer of the compt would have been aware that fortyshilling pieces had never been struck and so omitted any reference to them.

J. K. R. MURRAY

was so small that none has survived.

<sup>&</sup>lt;sup>2</sup> Scottish Record Office, E 101/2-3.

Commentationes de Nummis Saeculorum IX-XI in Suecia Repertis, ii, Kungl. Vitterhets Historie och Antikvitets Akademiens (Antikvariska serien 19), Almqvist & Wiksell, Stockholm, 1968, 413 pp. and 45 plates, Sw.kr.110, ed. NILS RASMUSSON and BRITA MALMER.

This volume is of principal interest to English readers because of the long article by Veronica Smart on 'Moneyers of the Late Anglo-Saxon Coinage, 973-1016' (pp. 191-276). Her material is drawn mostly from Hildebrand's Anglosachsiska Mynt, emended, brought up to date, and augmented by the work of later scholars, including Mrs. Smart herself. Her analysis is carefully conducted, and the mints themselves are arranged in six principal regional groups: Western mints, York, Five Boroughs, Southern Danelaw, London, and a Southern England group that draws together mints from the south-east and from the south-west, from Kent and Wessex. Within her regional divisions she lists the moneyers' names under their respective mints with up-to-date sensible notes on their origins and form. Great historical interest is attached to the two principal language divisions into which her material falls, Old English and Old Norse, not least because the distribution corresponds remarkably well to the language distribution of place-names in the regions. Among western mints Old English names predominate with a significant Scandinavian sprinkle at Chester; there is an overwhelming domination of Old Norse names at York; in the 'Five Boroughs' a substantial Scandinavian element (c. 40 per cent) appears at Lincoln, further south at Stamford the native English element prevails: the southern Danelaw has a scatter of Old Norse names but the major London mint is strongly Old English; the same English dominance is true of the southern mints, where indeed there are more continental German names than Old Norse. Mrs. Smart wisely makes no hard-andfast line of division between East Norse and West Norse, though even in this subtle and intricate matter Chester appears as a possible West Norse centre of importance. Her study helps to underpin the language arguments used to suggest heavy Scandinavian settlements, another pointer

to the validity of accepted conclusions concerning the strength and distribution of these settlements. On the numismatic side Mrs. Smart's work also has much to offer. Earlier hypotheses, notably those put forward by Mr. Dolley, on the existence of a managed currency, sequence of types, and regional peculiarities in style during the reign of Æthelred II, are upheld and strengthened by this detailed examination. There is a useful section on moneyers, who were regarded even in the reign of Æthelred as 'often fairly wealthy privileged citizens'. Her notes on the importance of dielinks, dating, and localization of dies provide convenient guides to current thought. Mrs. Smart is to be congratulated on making an important contribution to numismatic studies which also has bearing on the central historical problems of the age.

The other articles in the volume also reach a high technical standard and represent substantial contributions to German and Scandinavian numismatic studies. Gert Hatz's study of Tieler Denare (pp. 95-191) has a direct importance in English affairs because Tiel was so active a centre for the distribution of goods between England and the Rhine (p. 104). The careful analysis of the Näs hoard (pp. 277-372), discovered in 1704, includes an account of some 393 English coins, nearly all of the reign of Æthelred II (pp. 356-68). There is valuable work on the coinage of Anund Jacob, Cnut the Great, and Harthacnut by Nils Rasmusson and by Lars Lagerquist (a note on the Trondheim hoard of 1950, a hoard which contained 363 Anglo-Saxon pennies). The presence of so much good work on the products of late Carolingian denarial economy prompts again an inevitable comparison of the English and the continental achievement. It is revealing to find Peter Berghaus in a very acute note taking the first issue of as important a town as Münster back to the reign of Otto III 983-96. No doubt a close comparison of Ottonian German minting and English will bring out many points in common, but recent work seems to throw into increasing relief the advanced nature of English techniques and general organization certainly after the reign of Edgar.

Sylloge of Coins of the British Isles—University Collection, Reading: Anglo-Saxon and Norman Coins. Royal Coin Cabinet, Stockholm, Anglo-Norman Pennies, by C. E. BLUNT and MICHAEL DOLLEY with F. ELMORE JONES and C. S. S. LYON. Published for the British Academy and Kungl. Vitterhets Historie och Antikvitets Akademien, by the Oxford University Press and Spink & Son Limited, 1969. 87 pp.+20 pls. 60s.

This double fascicle of the Sylloge follows the acceptable form with the illustrations placed as closely as possible to the descriptions which are basic, and to some extent depend upon the accompanying plate. The book is not intended for the use of beginners; it is rather a source-book for numismatists and historians. Its authorship leaves room for no doubt of the scholarship of the work. The two collections catalogued in this volume are strikingly different from each other, the first having been formed over many years by an outstanding historian of the Saxon and Norman periods, of coins mostly in fine condition, which illustrate the history of the period. Each coin individually is a historic document, holding its own store of information, eclectically chosen by Sir Frank Stenton to form a part of this numismatic library for his own benefit and that of his students. The catalogue is preceded by an interesting biographical note about Stenton and also notes on personal names found on the coins, compiled by O. von Feilitzen.

The Anglo-Norman coins in the Royal Coin Cabinet, Stockholm, form the second collection catalogued in this volume. As stated, only post-conquest coins are dealt with, indicating that these coins form no part of the large-scale transfer of specie from England to Scandinavia which was such a feature of the later Saxon period, and must therefore be the result of trade or possibly the payment of mercenaries as the author mentions in his historical introduction. While this collection is by no means lacking in coins of individual interest and importance, its true value to the historian is as an entirety where frequency as well as rarity, absence as well as presence, can be given their true assessment.

Unfortunately, as acknowledged by the author and the Sylloge Committee, the plates of this second collection are not as clear as they should be. There is too much contrast and too much reflection. This is not the fault of the photography and it must be realized that coins in a collection of this kind are often bent, broken, worn or en-

crusted. Nevertheless it must be regretted that these photographs had to be made direct from the coins and not from casts as was done at Reading.

H. DE S. S.

Coins in History. By JOHN PORTEOUS. London (Weidenfeld and Nicolson) and New York (G. P. Putnam's Sons), 1969. 256 pp., 286 illustrations, and 4 maps. 5 guineas or \$15.00.

JOHN PORTEOUS has used the same splendidly unconventional formula as he did five years ago in his smaller work Coins. His earlier book ran very briefly from the Greeks to the present day, whilst his present book covers European coinage, at much greater length, from the collapse of the imperial monetary system in the third century and the reforms of Diocletian at its end to the destruction of the gold standard and the Latin Monetary Union in the 1914-18 war. Within this slightly reduced span of time Mr. Porteous has concentrated his attention on the four hundred years between the 'commercial revolution' of the thirteenth century and the 'price rise' of the sixteenth. This is the heart of the book in which he seeks to demonstrate that coinage 'holds up a sort of mirror (sometimes only a dim one) to history, especially to economic and social history'. He argues that from the seventeenth century onwards other forms of money were beginning to play a more important part than coinage, and that the preceding period was the great age of coinage. As a corollary Mr. Porteous declares: 'Coin collectors tend to be interested in rare coins. This book is mostly about the common ones . . . above all those which were traded and spent again and again.' In general he keeps to this intention, only occasionally being lured away by rare crusader pieces, or coins of the Italian renaissance which were, he freely admits, more beautiful than used. The book then is not designed primarily for coin collectors, and indeed collectors will not find it immediately useful. More directly useful for them is the old-fashioned work which details the coins of individual countries in turn. This book on the contrary attempts, usually successfully, to portray the coinage of Europe as a whole, period by period, although, here and there, there is a lingering tendency to go on dealing with the coinage of one country for too long before moving on to other comparable coins issued elsewhere. This occasionally mars the usually even flow of Mr. Porteous's narrative. The most mind-

jerking example of this is the sudden leap on page 67 from the crusader states in the twelfth and thirteenth centuries to England in the ninth and tenth centuries. Nevertheless collectors ought to read this book to put their interests in perspective. It should also be seen by anyone who pretends to a serious interest in social or economic history, although many economic historians may not be entirely satisfied by Mr. Porteous's seemingly uncritical acceptance of the quantity theory of money. It should find its way into every university and public library, but the price of five guineas may well deter quite a large number of private individuals from buying it. Those who do will, however, acquire five guineas' worth of book, for it is indeed sumptuously laid out. There is no trace here of the conventional grey plates at the end made from photographs of casts crammed together to get the maximum number on the page. Instead the illustrations are photographed direct from the coins and appear where they are needed, with the text to which they refer. Usually they are in the margins of the relevant page, and the large format (10 inches by 8 inches) allows for exceptionally wide margins for this purpose, but a certain number are full-page illustrations, and these include no less than thirty-two pages in colour. The photography is splendidly executed, bringing out the tactile qualities of the pieces illustrated. Most of the illustrations are the actual size of the pieces themselves, but many are doubled in size and some are larger, for example an English penny of Stephen's reign is shown at five times its actual size. Most of the illustrations are quite naturally of coins themselves, but Mr. Porteous has gathered together an interesting selection of additional illustrative material, showing gold and silver miners at work as well as moneyers, die-engravers and dies, coining machinery and mint-buildings, money changers and bankers, merchants' handbooks and government proclamations, and even ordinary citizens paying taxes in coin and burying hoards of coin. It is a pity that the excellent maps have been put at the end of the book and not in the relevant places in the text, and strange that there are no references to them in the text at all. At the end there is a useful two-page bibliography arranged under chapter headings, but this particular reviewer would have liked at least an occasional footnote. All in all it is the best and most agreeable introduction to the coinage of medieval and modern Europe available to the general reader.

PETER SPUFFORD

Seventeenth Century Tradesmen's Tokens. By J. L. Wetton. Number five of the Minerva Numismatic Handbooks, published by Corbitt & Hunter. 20s.

MR. WETTON has produced a most interesting introduction to this series. The illustrations are of high quality. There is no doubt that this series has been unjustly neglected in the past. Too many people think that, however interesting the seventeenth-century tokens are to the local historian, they are of little numismatic interest. Mr. Wetton puts the tokens into their proper perspective. He is very honest, and tells us that he does not guarantee the accuracy of his opinions, and that some of these, particularly regarding the numbers of tokens issued, involve guesswork. However, regarding this part of the work, I think that his ideas are very feasible.

It is very likely that Ramage was engaged on the tokens, and there is little doubt that this also applies to other coin engravers from the Mint. The ornaments on so many of the tokens resemble initial marks.

It would be interesting to know why 1666 is so common a date in the tokens. One would think that, as regards London and Middlesex at least, this would be a rare date, because of the Plague and the Great Fire. Are we faced with a 'fixed date' as with the contemporary silver coins of New England?

There are a number of points that Mr. Wetton raises, which many numismatists would regard as controversial and, in some cases, incorrect. The 'cutting of the larger coins into halves and quarters' mentioned on page 9 is misleading. When coins were cut, the silver penny was the only coin, and the cutting ceased when larger and smaller coins were issued in the thirteenth century. The statement (page 14) that the missing segment from the sides of tokens is always straight sided is wrong: it is often crescent shaped. The theory of the author, that on the vast majority of tokens which show three initials, one over two, the bottom two are of the issuer and his wife, seems too bold. Has Mr. Wetton enough definite evidence? The suggestions about the issuers of the tokens in Wells are not put forward as the author's opinions, and I think that they are so fanciful that few numismatists would take them seriously.

A point that Mr. Wetton does not raise is that of the great scarcity of the tokens in Northumberland and Westmorland. It seems that base Scottish coins circulated in these counties.

Much more research is needed on this series, and the author has indicated several directions for this. I feel sure that his handbook will stimulate interest into this most interesting and important series of tokens.

The bibliography is very helpful. Two additions that I would make would be the work published by Longmans on the tokens issued by booksellers, and the papers in the *Pharmaceutical Journal* on the tokens issued by apothecaries. w. s.

## OTHER LIBRARY ACCESSIONS, AND PERIODICAL LITERATURE

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- \*Studies in the composition of early medieval coins. D. M. Metcalf, J. M. Merrick, and L. K. Hamblin. Corbitt & Hunter, 1968. 63 pp., 4 plates. (Minerva numismatic handbooks, no. 3.)
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- \*A mint of trouble, 1279 to 1307. Mavis Mate. Speculum, 44 (2), April 1969, pp. 201–12. Administration of the London and Canterbury mints.
- \*The crown pieces of Great Britain and the British Commonwealth of Nations, 1551–1961. H. W. A. LINECAR. 2nd ed. 1969. 102 pp.
- \*English proof and pattern crown-size pieces, 1658–1960. H. W. A. LINECAR and A. G. STONE. 1968.
- \*The J. D. Clucas Collection of Manx coins, tokens and medals: a check list with notes. Douglas: Manx Museum and National Trust, 1965. [1], 18 pp.

#### Ireland

- Two numismatic notes: 1, Some Hiberno-Norse coins of Dublin recently discovered on the Baltic Island of Gotland; 2, The mythical Roman coin-hoard from Tara. M. Dolley. *Journal, Royal Society of Antiquaries of Ireland*, 98, 1968, pp. 57-65.
- The Hiberno-Norse coins in the 1967 find from Lummelunda parish, Gotland. M. Dolley. Ibid., pp. 197–9.
- \*Anglo-Irish monetary policies, 1172–1637. M. DOLLEY. Historical studies: papers read before the Irish Conference of Historians, VII: [8th conference, Belfast, 1967], edited by J. C. Beckett, 1969, pp. 45–64.
- \*Sylloge of coins of the British Isles: Ulster Museum, Belfast, Part I: Anglo-Irish coins, John-Edward III. R. H. M. Dolley and W. A. Seaby. 1968. lvii+[33] pp., 16 plates.

\*The Irish mints of Edward I in the light of the coin-hoards from Ireland and Great Britain. R. H. M. Dolley. *Proceedings of the Royal Irish Academy*, section C, 66 (3), January 1968, pp. 235-97.

#### **Tokens**

- New light on the seventeenth century token issuers of Chepping Wycombe. George Berry. *Records of Bucks.*, 18 (2), 1967, pp. 150-63, plates V-X.
- 17th c. tokens of London. I. C. THOMSON. *London Archaeologist*, 1 (1), Winter 1968, pp. 8–10, 22;1 (2), Spring 1969, pp. 31–2.
- \*Specious tokens, and those struck for general circulation, 1784–1804. R. C. Bell. Corbitt & Hunter, 1968. xvii, 258 pp.

The cardboard tokens of Malcomson Brothers of Portlaw, Co. Waterford. A. E. J. Went. *Journal, Royal Society of Antiquaries of Ireland*, 98, 1968, pp. 75–8.

#### Medals

- \*A catalogue of campaign and independence medals issued during the twentieth century to the British Army. N. W. Poulsom. Corbitt & Hunter, 1969. 127 pp. (Minerva numismatic handbooks, No. 4.)
- \*Medallic craftsmanship by John Pinches (Medallists) Ltd. [1967?] [24] pp. 1969 supplements as inserts.
- \* Works asterisked have been added to the library by donation or purchase. The librarian acknowledges with gratitude those donations also which cannot be recorded here.

# PROCEEDINGS OF THE BRITISH NUMISMATIC SOCIETY, 1969

(For Officers and Council for 1969 see vol. xxxvii, p. 210)

At an Ordinary Meeting held at the Warburg Institute on Tuesday, 28 January, Mr. Lyon, President, in the chair, Mr. V. Olamo was elected to Ordinary Membership, and Mr. R. S. Sancroft-Baker was elected to Junior Membership. Dr. Kent read a paper entitled 'Early Coining Machinery in England'.

At an Ordinary Meeting held at the Warburg Institute on Tuesday, 25 February, Mr. Lyon, President, in the chair, Mr. Ray Byrne, Mr. John Ferdinand Kayser, Mr. A. Kirsten, Mr. Peter Leach, Mr. M. R. Maddalino, Mr. Alfred Organ, the Reading Coin Club, and the Library, University of Toronto, were elected to Ordinary Membership. Short papers on recent Edwardian coin hoards were read by Miss Archibald and Mr. Woodhead, the latter speaker in conjunction with Dr. Tatler and Mr. Ian Stewart.

At an Ordinary Meeting held at the Warburg Institute on Tuesday, 25 March, Mr. Lyon, President, in the chair, the President announced that this meeting marked the 60th anniversary of the election of Mr. King as a Member of the Society. This announcement was received by Members with applause, and Mr. King thanked them for their good wishes. Mr. Paul E. Oldham and Mr. Robert B. K. Stevenson were elected to Ordinary Membership. Mr. H. E. Pagan read a paper entitled 'Ninth Century Northumbrian Numismatic Chronology'.

At an Ordinary Meeting held at the Warburg Institute on Tuesday, 22 April, Mr. Lyon, President, in the chair, Mr. John Billman, Mr. Arthur Oliver Chater, Mr. John Matthews, and Mr. William Ronald Whelan were elected to Ordinary Membership. Mr. J. Porteous read a paper entitled 'Coins of the Netherlands from the 13th to the 17th Centuries'.

At an Ordinary Meeting held at the Warburg Institute on Tuesday, 27 May, Mr. Lyon, President, in the chair, the President presented the Sanford Saltus Medal for 1968 to Mr. E. J. Winstanley. Miss R. A. C. B. Andrews, Mr. Malcolm D. Brown, Mr. B. J. Castenholz, Mr. Stanley Compton, Mr. Hubert John Durnell, Mr. Michael R. Naxton, and the Libraries, Washington University, St. Louis, Missouri, were elected to Ordinary Membership. The meeting was then devoted to short contributions and exhibitions relating to the 18th century.

At an Ordinary Meeting held at the Warburg Institute on Tuesday, 24 June, Mr. Lyon, President, in the chair, Mr. Leslie L. Fletcher, Mr. Robert Guy Hobbs, Mr. A. B. Mackay, Mr. David G. Shaw, and the Library, University of Southampton, were elected to Ordinary Membership. Mr. Lyon read a paper entitled 'Mint Organisation, Æthelred II and Cnut'.

At an Ordinary Meeting held at the Warburg Institute on Tuesday, 23 September, Mr. Lyon, President, in the chair, Mr. David Hill, Mr. Neville J. Saunders, Colchester

and District Numismatic Society, Ipswich Numismatic Society, and the Library, University of Kansas were elected to Ordinary Membership. The President presented to Mrs. Peck the 1968 Sanford Saltus Medal which had been posthumously awarded to her husband, the late C. Wilson Peck. A paper by Mr. Michael Dolley entitled 'Anglo-Irish Monetary Policy' was read by Mr. Ian Stewart.

At an Ordinary Meeting held at the Warburg Institute on Tuesday, 28 October, Mr. Lyon, President, in the chair, Mr. André Paul de Clermont, Dr. Peter Gaspar, Mr. C. F. Gilboy, Mr. Robert Clive Ilsley, Mr. Terence Anthony Letch, and Mr. Roger Alan Shuttlewood were elected to Ordinary Membership. A paper by Mr. John Brand and Mr. Blunt entitled 'Mint Output of the mid-13th Century' was read. Mr. Ian Stewart read a paper entitled 'Short Cross Pennies following King John's Recoinage, and irregular issues of the period'.

At the Anniversary Meeting held at the Warburg Institute on Tuesday, 25 November, Mr. Lyon, President, in the chair, Mr. G. E. Chapman, Mr. David G. Freedman, Mr. Eliott Montroll, and Miss Janet Wagner were elected to Ordinary Membership. Mr. Richard Hourihan and Mr. Paul Power were elected to Junior Membership.

The following Officers and Council were elected for 1970:

President: C. S. S. Lyon, M.A., F.I.A.

Vice-Presidents: D. F. Allen, C.B., M.A., F.B.A., F.S.A.; C. E. Blunt, O.B.E., F.B.A., F.S.A.; G. V. Doubleday; H. H. King, M.A.; H. Schneider; E. J. Winstanley, L.D.S.

Director: B. H. I. H. Stewart, M.A., F.S.A., Scot.

Treasurer: Clifford H. Allen, F.C.A.

Secretary: W. Slayter.

Librarian: R. H. Thompson.

Council: Miss M. P. Bellamy, B.A.; D. W. Dykes, M.A.; D. R. D. Edmunds, M.A.; R. N. P. Hawkins; J. Lavertine, M.D.; Major C. W. Lister, R.A.; D. M. Metcalf, M.A., D.Phil.; H. R. Mossop, D.F.C.; Mrs. J. E. L. Murray, M.B.E., M.A.; H. Pagan, B.A.; J. Porteous, M.A.; D. L. F. Sealy, B.Sc.; R. J. Seaman; P. Woodhead.

Corresponding Member of Council for Ireland: M. Dolley, B.A., M.R.I.A., F.S.A.

Corresponding Member of Council for the United States of America: H. Grunthal. Mr. Lyon delivered his Presidential Address.

## **EXHIBITIONS**

March

By Mr. Pagan (by permission of the Keeper of the Yorkshire Museum).

A few of the 186 coins of Eanred in a find of 1,500 stycas of the period Eanred-Osberht made at Bolton Percy (Yorks.) in November 1967. Only five of these 186 coins were of moneyers the bulk of whose production consisted of coins of silvery appearance. Three of these were exhibited (nos. 34, 35, 36).

Three silvery coins of Monne with legend MONNE (nos. 112, 142, 144) were exhibited, together with three coppery coins of Monne with legend MONNE (nos. 109, 114, 119) to

show that the production of this moneyer may overlap from the silvery series to the coppery series. He would be the only moneyer providing any continuity between the two series.

Photographs of two lead weights found in a Viking-age burial in Fjaere parish, in the summer of 1876, and now preserved in Universitetets Myntkabinett, Oslo. They weigh 18·18 and 10·42 gm. respectively. Inserted in the top of each is a Northumbrian styca. The legends are +EANRED REX and HRERED (a habitual error for HERRED). Both coins are of regular Northumbrian style.

## By the President.

Base silver stycas.

- 1. Æthelred, moneyer Cuthhard.
- 2. Eanred, moneyer Cuthhard.
- 3. Æthelred, moneyer Ceolbald (by permission of the Director).
- 4. Æthelred, moneyer Tidwulf (2 coins).
- 5. Archbishop Eanbald, moneyer Eadwulf.
- 6. Archbishop Eanbald, moneyer Ethelweard.
- 7. Copper styca of Æthelred, moneyer Leofthegn, with animal reverse.

## April

Mr. Porteous, Mr. Blunt, and Mr. Woodhead exhibited coins in illustration of the paper including the following:

Unidentified @DWTRRTNGUNShVI.CIVITTSVTE: ROP Imitation of London sterling, reading CIVI/TTS/UON/ETT

Sterling of Brabant, apparently unpublished, showing copy of 'York' quatrefoil in centre of reverse.

## May

By Mr. R. N. P. Hawkins, eighteenth-century items.

- 1. A silver striking of an evasion farthing GEORGE / RULES / BRITAN / NIAs / ISLES.
- 2. A copper die duplicate of No. 1.
- 3, 4, 5, and 6. The SR ISAAC NEWTON farthing token, rev. cornucopia, dated 1793, and three Britannia reverse evasions of it showing successive degradation of design.
  - 7. An iron-smelting ticket of H A & Co., NETHER.HALL FURNACE.

## By Mr. W. Slayter.

- I. The London Gazette for 8–12 August 1797, containing the Royal Proclamation legalizing the first regal coinage of Matthew Boulton, together with the two coins mentioned in the Proclamation.
- II. The silver token for one sixth of a guinea, struck by Matthew Boulton, for John Wilkinson in 1788.
- III. Forgeries of eighteenth-century coppers, together with 3 genuine coins for comparison.
  - 1. George II halfpenny, 1737.
  - 2. George III farthing, 1775.
  - 3. George III halfpenny, 1773.

- IV. Evasions of one George III farthing, and 5 halfpennies.
  - 1. Farthing. Bust of George III, Obv. George Sus-Sex.
  - 2. Bust of George III. Obv. Gregory III Pon.
  - 3. *Obv.* Bust of Colonel Kirk. *Rev.* Britons Happy Isle.
  - 4. Bust of William III ?. Gulielmus Shakespeare. Rev. Englands Glory.
  - 5. Obv. Bust of Alfred. Rev. Britons Glory.
  - 6. Evasion of Irish halfpenny.

Obv. Bust of George III. Cornwallis. Ind.

Rev. Hibernia.

## June

By Mr. D. L. F. Sealy.

British West Africa Penny, 1937/43 mint freak.

This appears to be the product of two genuine reverse dies of different dates, used together. It is very thin, has a milled edge, and no hole, but seems to be of the correct cupro-nickel alloy. It is lightly struck, slightly too large in diameter, and has a 'burr' around the rim on one side. The coin seems to be a clandestine product of the Heaton\* Mint at Birmingham, but further clarification is sought. It would be most unlikely for the dies to escape from the mint.

\* Heaton was the only mint to strike regular B.W.A. pennies of both 1937 and 1943.

## October

By Mr. D. L. F. Sealy.

1922 Penny with reverse type of 1927.

Also normal 1922 and 1927 pennies for comparison.

Unknown to Peck. Probably a pattern made in 1925 which entered circulation accidentally. Two so far known.

Mr. Ian Stewart and Mr. J. D. Brand exhibited short cross pennies of official and irregular issues in illustration of the paper.

## ADDRESS BY STEWART LYON

## PRESIDENT OF THE BRITISH NUMISMATIC SOCIETY

Delivered at the Anniversary Meeting, 25 November 1969

## HISTORICAL PROBLEMS OF ANGLO-SAXON COINAGE—(3) DENOMINATIONS AND WEIGHTS

## Introduction1

ONE of the problems of the Anglo-Saxon and Norman currency systems is to distinguish units of account from units of weight and denominations of coinage.<sup>2</sup> The mancus and the penny were used in each of these senses; the pound, the mark, the ora, and—generally—the shilling were employed in the first two of them only.

What, for example, was a pound? As a unit of account it seems always to have consisted of 240 pence, though in Norman times a payment of a pound could only be discharged by 240 minted pennies if it were due 'by tale'. If it were due to the crown 'blanched' the payment would have to be large enough to leave a standard pound of silver by weight after assay; alternatively it could be met by tale at a surcharge which, at the time of the Domesday survey, was as high as 25 per cent.<sup>3</sup>

Thus in the reign of William I there must have been a pound of silver which was close to the weight of 300 pence. The entry in Domesday Book for Bosham, Sussex, indicates that fifty pounds burnt and weighed amounted to £65 by tale; in other words, that it took 312 pence to yield a pound.<sup>4</sup> These pence would have weighed close to 6,630 Troy grains (430 g.), taking the average weight of late pence of William I at  $21\frac{1}{4}$  grains (1.38 g.),<sup>5</sup> and they might have lost about 5 per cent when melted down.<sup>6</sup> We can compare this with David I's Scottish pound of the twelfth century, which was said to have weighed 25 shillings of sterling pennies and to have contained fifteen ounces: at  $22\frac{1}{2}$  grains to the sterling it ought therefore to have weighed 6,750 grains (437.5 g.).<sup>7</sup>

So for some purposes, at least, money seems to have been reckoned by weight according to a mercantile pound of fifteen ounces.8 How was such a pound related to the Anglo-Saxon pound of capacity (cf. pint) referred to in a tenth-century leech book from

- <sup>1</sup> I have taken the opportunity of substantially rewriting this section of the Address, and a number of other sections.
- <sup>2</sup> Essential reading for an appreciation of this subject is H. M. Chadwick, Studies on Anglo-Saxon Institutions (Cambridge, 1905), though some of his conclusions have to be modified considerably in the light of subsequent numismatic research.
  - 3 See below, p. 210.
- <sup>4</sup> Totum manerium TRE et post valuit xl libras. Modo similiter xl lib. Tamen reddit l lib. ad arsuram et pensum, quae valent lxv lib.—D.B. I, fo. 16.
  - <sup>5</sup> See the table of weights in BMC (N) i, p. cliii.
- 6 This was the allowance to a sheriff in the late twelfth century when 'blanching' a payment he had made on the king's behalf ('Dialogus de scaccario', English Historical Documents ii, ed. Douglas [London, 1953] at p. 567).
- <sup>7</sup> E. Burns, *The Coinage of Scotland*, i (Edinburgh, 1887), p. 228. However, Mrs. J. E. L. Murray has pointed out to me that the prescribed weight for the sterling was 32 grains of wheat. Whether this should be equated with 22½ or 24 Troy grains is not clear. (See also the footnotes on pp. 205 and 222 below.)
- 8 For discussion of a similar pound in the laws of Æthelred II see p. 214.

Winchester? This book appears to tell us, in pennyweights, the differences in weight between pounds by capacity of various commodities and a similar pound of water, viz.:

Pund eles (oil) gewihth (weighs) xii penegum (pence) laesse thonne pund waetres (water). & pund ealoth (ale) gewihth vi penegum mare thonne pund waetres. & i pund wines (wine) gewihth xv penegum mare thonne i pund waetres. & pund huniges (honey) gewihth xxxiiii penegum mare thonne pund waetres. & i pund buteran (butter) gewihth lxxx penegum laesse thonne pund waetres. & pund beores (beer) gewihth xxii penegum laesse thonne pund waetres. & i pund melowes (meal) gewihth cxv penegum laesse thonne pund waetres. & i pund beana (beans) gewihth lv penegum laesse thonne pund waetres. & xv pund waetres gath to sestre (sextarius).<sup>1</sup>

Research into these measurements might throw some light on the size of this pennyweight. Was it, for example, the 240th or the 300th part of a mercantile pound? It could scarcely have been a fraction of a 'currency pound'—i.e. the weight of 240 minted pennies—which varied greatly from time to time. The maximum value of the currency pound was about 6,480 Troy grains (420 g.), attained periodically during the period from c. 973 to c. 1053,² and it may have had a minimum value as low as 2,400 grains (155·5 g.) for coins issued by the London mint for a short period in about 1049.³ Not until the late twelfth century did it finally settle down for a considerable period at a level close to the figure of 5,400 grains (350 g.), which was to become known as the Tower pound.⁴ This twelve-ounce pound was, for several centuries, the 'mint pound' out of which prescribed numbers of coins of different denominations were ordered to be struck

With the advent of the twelfth century we no longer find payments to the crown being made with a surcharge of 25 per cent: it seems only to have been necessary to make good the weight of a Tower pound in pure silver, and for a time in Henry I's reign a 'blanching' addition as small as  $2\frac{1}{2}$  per cent was apparently acceptable.<sup>5</sup> What help can a study of the coins offer towards an understanding of the significance of these different pounds?

## The Roman pound, the solidus, and tremissis

The origin of the Anglo-Saxon pound in the context of coinage must surely lie in the corresponding Roman pound. Values ranging from 322·56 to 327·45 g. (4,978 to 5,053 Troy grains) have been assigned to the latter, though as Mr. Grierson has pointed out there is a degree of spurious accuracy in such figures. The late Roman solidus was struck at six to the ounce, or seventy-two to the pound, and was continued at this level for centuries by the Byzantines. The consistency of weight is remarkable; for example 350 solidi of Anthemius (467–72) fresh from the mint averaged 4·48 g. with a maximum weight of 4·515 g.; thus the pound could not be far removed from 325 g.6 For the purpose

<sup>&</sup>lt;sup>1</sup> Early English Manuscripts in Facsimile, v (Copenhagen, 1955, ed. C. E. Wright) f. 108 b. The hand is identical with that of the annals for 925-55 in the Parker Chronicle (N. R. Ker, Catalogue of Manuscripts Containing Anglo-Saxon [Oxford, 1957] 332-3). The manuscript is edited and translated in Leechdoms, Wortcunning, and Starcraft in Early England, ed. O. Cockayne, vol. ii (Rolls Society, London, 1865), pp. 298-9, where it is suggested that fifteen ounces of water to the sester is the correct relationship. I have quoted it in Old English, but with modern letters, in order to convey its feeling; it virtually translates itself.

<sup>&</sup>lt;sup>2</sup> See p. 216, n. 5.

<sup>&</sup>lt;sup>3</sup> i.e. towards the end of the *short cross* type of Edward the Confessor.

<sup>&</sup>lt;sup>4</sup> The Tower pound of 240 dwt. was thought of as containing not 5,400 Troy grains (0.0648 g. per grain) but 5,760 Tower grains (0.0608 g. per grain), which may have been equivalent to a former rating of 7,680 wheat grains (presumably c. 0.0456 g. per grain)—see Ruding, *Annals of the Coinage*, 3rd ed., i. pp. 7 and 193.

<sup>&</sup>lt;sup>5</sup> 'Dialogus', EHD ii, p. 516.

<sup>&</sup>lt;sup>6</sup> NC 1964, 'President's Address', pp. xi-xiv.

of this discussion let us assign to it a value of 324 g.  $\pm 1$  per cent, or 5,000 Troy grains  $\pm 1$  per cent. The central figures are exactly equivalent and are convenient to handle: they correspond to an ounce of 27 g. (416·7 grains) and a solidus of 4·50 g. (69·4 grains), and the 1 per cent range must surely include the true value.

Now the Roman solidus officially weighed 24 siliquae (i.e. carats, or carob seeds); thus the siliqua must have been a weight of 0·188 g. (2·89 grains)  $\pm 1$  per cent. The tremissis, or third of a solidus, became the principal coin of the Merovingians, who reduced its weight from eight to a declared seven siliquae, which would have been 1·31 g. (20·2 grains) $\pm 1$  per cent. Taken literally this means a rate of approximately 247 tremisses to the Roman pound. Mr. Grierson has suggested that the Merovingian adjustment was intended to bring the coinage on to a Germanic standard of 20 barley (i.e. Troy) grains, in which case the declared weight of seven siliquae would have been an approximation designed to establish the value of the new tremissis (and the corresponding solidus) in relation to the contemporary Byzantine issues. The Anglo-Saxon gold coins in the seventh century hoard from Crondall could well have been struck to a standard of 20 grains. The average weight of seventy-three coins listed by C. H. V. Sutherland² is 1·294 g. (20·0 grains) and the distribution of weights is remarkably compact:

Weight (grams)	No. of coins	Equivalent weight (grains)
Over 1:32	4	Over 20·4
1.32	5	20.4
1.31	12	20.2
1.30	19	20.1
1.29	11	19-9
1.28	10	19-8
1.27	3	19.6
1-26	4	19.4
1.25	4	19.3
Under 1.25	1	Under 19·3
	73	

Only thirteen coins differ from the average by more than half a grain. The number which would have weighed a Roman pound would thus have been  $250\pm1$  per cent, though it is very doubtful whether this quantity had any significance.

Dr. D. M. Metcalf and Mrs. J. M. Merrick have shown that the Merovingian and Anglo-Saxon tremisses in the Crondall hoard were heavily debased with silver and that there is a strong statistical probability of the debasement having proceeded in steps of one siliqua, or one-seventh of the weight of the Merovingian tremissis.<sup>3</sup> Of the Crondall coins which they analysed, some appear to have contained five siliquae of gold and others four. Such steps seem strange in the context of a change to a Germanic standard of twenty barley grains—a figure that does not lend itself to division by seven—and should perhaps make us pause before accepting too readily the introduction of the barley grain as the unit of weight at such an early stage.

<sup>&</sup>lt;sup>1</sup> See below, p. 212.

<sup>&</sup>lt;sup>2</sup> C. H. V. Sutherland, Anglo-Saxon Gold Coinage in the Light of the Crondall Hoard (Oxford, 1948), pp. 75-99, Crondall nos. 25-97.

<sup>&</sup>lt;sup>3</sup> D. M. Metcalf and J. M. Merrick, 'Studies in the Composition of Early Medieval Coins', NC 1967, pp. 167-81.

The reduction in the weight of the Merovingian tremissis, which took place in the 570s,¹ was accompanied by a corresponding reduction in the quasi-imperial Provençal solidus which seems eventually, some 200 years later, to have become known as a solidus mancus. (The derivation of the term mancus is still contested; it may have had an Arabic origin, or may simply be the Latin 'deficient'.²) On a Germanic standard of 60 barley grains the light solidus would have weighed 3·89 g., taking the barley grain as identical with the modern Troy grain. The coins themselves sometimes declare a weight of twenty siliquae and sometimes twenty-one (i.e. 3·75 g. or 3·94 g. respectively, ±1 per cent), which seems to indicate that the true weight was intended to lie between these figures. S. E. Rigold obtained an average weight of 3·86 g. (59·6 grains) for ten quasi-imperial solidi, and noted that eight of them varied from the mean by less than 1 per cent.³ There was no deficiency in the purity of the gold, until debasement set in under Dagobert II (629–639).⁴

## The mancus, gold weight, and gold coin

In England the mancus, as it is called in documents from the late eighth century onwards, was quite clearly used as a unit of weight for gold objects. Ceolwulf I of Mercia made a grant of land in Kent to Archbishop Wulfred in 822, one of the considerations for which was a gold bracelet containing seventy-five mancuses.<sup>5</sup> In 855 Burgred received from Bishop Ealhun of Worcester two gold armlets which weighed forty-five mancuses in return for a concession over some land in Gloucestershire.<sup>6</sup> Bishop Ælfwold of Crediton, who died in 1012, bequeathed to Wilton 'a chalice and a paten of 120 mancuses of gold all but three mancuses'.<sup>7</sup> It seems reasonable to suppose that, just as the solidus was a stable unit of weight for gold in the late Roman and the Byzantine empires, so was the mancus in Anglo-Saxon England. However, it is difficult to establish its precise weight from the surviving coins, because the mancus, when minted, had a variable weight as in the case of the penny.

There are very few references in the documents to the mancus as a coin. In one of these King Eadred (946–55) gave instructions in his will that 2,000 mancuses of gold were to be taken and minted into mancuses for distribution throughout the bishoprics 'for the sake of God and the redemption of my soul'.8 None of these is known today, and indeed only three gold coins have survived from the Anglo-Saxon period which could have been mancuses and which give the impression of issues made with royal authority: one is of Edward the Elder, another of Æthelred II, and the third of Edward the Confessor. All three were struck from penny dies, the second bearing the Lewes mint-signature and the third that of Warwick.9 Hitherto their varied weights (74·1, 51·5, and 54·1 grains respectively or 4·80, 3·34, and 3·50 g.) have been regarded as casting doubt on their

<sup>&</sup>lt;sup>1</sup> J. P. C. Kent, 'Problems of Chronology in the Seventh Century Merovingian Coinage', *Cumobelin* (1967), p. 25.

<sup>&</sup>lt;sup>2</sup> See, for example, P. Grierson, 'Carolingian Europe and the Arabs: the Myth of the Mancus', Revue Belge de Philologie et d'Histoire, xxxii (1954), pp. 1059-74.

<sup>&</sup>lt;sup>3</sup> S. E. Rigold, 'Imperial Coinage in Southern Gaul', NC 1954, p. 104.

<sup>4</sup> Kent, art. cit., p. 26.

<sup>&</sup>lt;sup>5</sup> English Historical Documents vol. i (ed. White-lock; London, 1955), no. 83.

<sup>&</sup>lt;sup>6</sup> EHD i, no. 90. <sup>7</sup> EHD i, no. 122.

<sup>8</sup> EHD i, no. 107.

<sup>&</sup>lt;sup>9</sup> See the two definitive articles by D. F. Allen and C. E. Blunt in BNJ xxv, pp. 259-81, and another by C. E. Blunt and Michael Dolley, NC 1968, pp. 151-9. In the latter the weight of the coin of Edward the Elder is corrected on p. 158 n.

identification as minted mancuses, but in fact these weights could be explained on the basis that they were intended to weigh exactly three silver pennies of the current minting. For example, forty out of sixty-five pence listed in the British Museum Catalogue which are of the same design as the gold coin of Edward the Elder (BMC Type ii) weigh between 24·0 and 24·9 grains. The Æthelred coin is at the light end of the range of weights of pence bearing the 'helmet' type, which extends from 24 down to 16 grains at mints in Sussex and Kent: a penny from the same obverse die as the gold coin, but struck when the die was fresher, weighs 19·8 grains. The gold coin of Edward the Confessor is of the 'expanding cross' type, the pence of which began on a light standard of about 18 grains: this standard was raised to about 27 grains, apparently as a result of the abolition of the heregeld in 1051. From the diameter of the beaded outer circle on obverse and reverse it is clear that the gold coin belongs to the period of the light issue, for which its weight is entirely appropriate on the basis of a ratio of three to one.<sup>2</sup>

A much earlier coin, by a moneyer Ciolheard but with no reference to royal authority, weighs 63.6 grains (4.12 g.). If, as seems probable, it was struck in the reign of Coenwulf of Mercia, it conforms to the same pattern: six out of eight pence of Coenwulf's moneyer of that name weigh between 20.1 and 22.3 grains. So, perhaps, does the gold coin by Offa's moneyer Pendred, weighing 57.8 grains (3.74 g.) as compared with seventy-nine out of 160 pence of groups 1 and 2 of Offa which weigh between 18.0 and 19.9 grains. All these coins, therefore, may bear a fixed relationship by weight of three to one with the silver pence struck contemporarily.

This implies a ratio of ten to one between a given weight of minted gold and the same weight of minted silver, having regard to the consistent relationship of thirty pence to a mancus which is found in the documents. In the ordinance of the bishops and reeves of the London district in Athelstan's reign an ox is valued variously at a mancus and at thirty pence.<sup>5</sup> As late as the so-called 'Laws of Henry I' the relationship was recognized, as for example *v* mance que faciunt xii sol. et vi den.<sup>6</sup> It followed that a mancus was also equated with six of the short shillings, each of five pence, in which fines and compensations were usually expressed in the West Saxon law codes. The compiler of the 'Laws of Henry I' found these shillings confusing and tended to translate them into mancuses, as when he wrote xxx solidi ad manbotam, id est hodie v mance.<sup>7</sup>

It is not necessary to assume that references to mancuses are always to be taken as implying payments in gold. In 799 Coenwulf of Mercia restored some lands to Christ Church, Canterbury, for 'the payment of money, whose estimation amounts to 100 mancuses'. Bishop Ælfwold of Crediton (997–1012) made various bequests expressed in mancuses of gold, but another was described as five mancuses of pence. Presumably by this phrase he meant 150 pence. Nevertheless it is clear that gold was handed over on many occasions when land was purchased, though we do not know whether minted gold was ever used. In 994 Æscwig, bishop of Dorchester, received an estate from Archbishop Sigeric of Canterbury in exchange for 90 pounds of refined silver and 200 man-

<sup>&</sup>lt;sup>1</sup> See BNJ xxviii, Pl. 29 and xxix, p. 191. Mr. H. H. King kindly allowed me to weigh his silver penny.

<sup>&</sup>lt;sup>2</sup> The four known light pennies of Warwick weigh 16·9, 17·0, 17·3, and 18·0 grains—see *BNJ* xxxiv, pp. 78–9.

<sup>&</sup>lt;sup>3</sup> BNJ xxxiv, pp. 8-10 and xxxii, p. 58.

<sup>4</sup> See art. cit. in NC 1968, and C. E. Blunt, 'The

Coinage of Offa' in Anglo-Saxon Coins (ed. Dolley), p. 54. <sup>5</sup> EHD i, no. 37.

<sup>&</sup>lt;sup>6</sup> F. Licbermann, *Die Gesetze der Angelsachsen* i (Halle, 1903), p. 593, art. 76. 6a.

<sup>&</sup>lt;sup>7</sup> Liebermann i, p. 587, art. 69. 2.

<sup>&</sup>lt;sup>8</sup> EHD i, no. 80.

<sup>&</sup>lt;sup>9</sup> EHD i, no. 122.

cuses of the purest gold, which the archbishop needed to buy immunity for Christ Church Cathedral during the Danish raid of that year.<sup>1</sup>

Such references to payments partly in mancuses of gold and partly in pounds of silver are not uncommon at this time. The Atheling Athelstan, who died in 1015 and was the eldest son of Æthelred II, refers in his will to three estates he bought from his father, one for 200 mancuses of gold by weight and five pounds of silver, and the others each for 250 mancuses of gold by weight.2 We cannot be sure, but it is conceivable that the prices of all three estates were intended to be the same. This would be the case if fifty mancuses of gold were equivalent to five pounds of silver. Taking a mancus at thirty pence the figures can be reconciled on the basis of 300 pence to a pound of silver—a relationship for which we have already seen evidence from later in the eleventh century.3

When we come to look at this equation in terms of shillings the pattern is confused. Taking the shilling at five pence, a pound of silver would have to be worth sixty shillings. This is a relationship which is well known in Mercia, where at least two of the three estates mentioned by the atheling were situated.<sup>4</sup> For example, a charter of Burgred, 150 years earlier, refers to the purchase of the liberty of an estate in London for sixty shillings of silver, and adds that it had been purchased before with the same amount of money, namely one pound. But there is a difficulty, because the shilling of the Mercian laws contained four pence, not five, so that 300 pence, or ten mancuses, would presumably have been reckoned at seventy-five of these shillings. Indeed the London ordinance of Athelstan's reign which values an ox at a mancus or thirty pence also appears to equate a payment of four pence with a shilling.6

Yet the fact is that many recorded payments in Anglo-Saxon charters—not just Mercian charters—are expressed either in pounds of silver, or in multiples of ten (sometimes five) mancuses of gold. This reinforces the impression that there may have been an identity of value between the pound and ten mancuses when payment by weight was involved. Had a mancus of gold been equated with thirty 240ths of the silver pound, multiples of eight mancuses, rather than ten, could have been expected to be the general rule.

## Shillings, marks, and ores

The problem of the London ordinance apart, the argument for an equation between 300 pence and a pound of silver, as compared with 240 pence and a pound of account or a currency pound, could perhaps be extended to explain the apparent difference between the fourpenny and fivepenny shillings. Is it possible that the fourpenny shilling of the Mercian laws was originally the sixtieth part of a (mercantile) pound of silver which was divided into fifteen ounces of sixteen heavy pennyweights; and that the fivepenny shilling of the West Saxon laws was the forty-eighth part of a pound 20 per cent lighter, which was divided into twelve similar ounces of twenty light pennyweights? On such a hypothesis the shillings would be identical, and the West Saxon pound could perhaps

<sup>1</sup> EHD i, no. 118.

<sup>&</sup>lt;sup>3</sup> See above, p. 204.

<sup>4</sup> Adderbury, Oxon., and Marlow, Bucks. The third, a 250-mancus estate at 'Weston', cannot be identified precisely.

<sup>5</sup> EHD i, no. 92.

<sup>&</sup>lt;sup>2</sup> EHD i, no. 130.

<sup>6</sup> The members of a peace-guild in the London area agreed to contribute four pence towards it, 'and each man was to pay his shilling who had property that was worth thirty pence' (EHD i, no. 37).

<sup>&</sup>lt;sup>7</sup> See below, p. 215, for a discussion of the possible identity between the shilling and 1-ounce.

be thought of as a theoretical currency pound, five (minted) pence of which would be needed to discharge a debt of four pence when the debt was payable in silver by weight.<sup>1</sup>

Two other pieces of evidence point in this direction. The first concerns the value of the mark, a unit of weight and account which was of Scandinavian origin. In Anglo-Saxon sources it is most commonly found in the form of the half-mark, and as such it first appears in the late ninth century in the treaty between Alfred and Guthrum Athelstan.<sup>2</sup> From the laws it is quite clear that the half-mark contained four *ores*, at least from the beginning of the eleventh century.<sup>3</sup> As a unit of account the ora, in late Anglo-Saxon and early Norman times comprised sixteen pence. Some fragments of surveys from the abbey of Bury St. Edmunds have survived from the time of Abbot Baldwin (1065–98) which demonstrate this and also show the process of translation of ores into Norman (twelvepenny) shillings. The abbot gave to his brethren as a charitable gift the rent of two mills at Lackford. This is first recorded as half a pound from the one and twelve ores from the other. A later entry describes it as ten shillings from one and sixteen shillings from the other. Also two fat pigs had to be produced to supply lard, or else three ores. In the later entry the alternative is four shillings.<sup>4</sup>

Now on this reckoning a mark of account at the time of the Conquest must have been 128 pence, or 10s. 8d. Norman. It may, perhaps, be presumed by analogy that a mark of silver by weight contained 128 (heavy) pennyweights. But when the Pipe Rolls of Henry I refer to a mark of silver they use it as a synonym for 160 pence, as for example in the account of Gloucestershire in 31 Henry I: 'Ælfric, son of Godric, accounts for 15 marks of silver in respect of his father's land and office. He has paid in the Treasury 40 shillings and he owes 12 marks of silver.' By the reign of Henry II the term 'mark' is being used to denote a sum of 13s. 4d. without any reference to silver. In this new sense its origin seems clearly to lie in an equality between five minted pence and four (heavy) silver pennyweights.

As has already been indicated, an identical relationship is found in Domesday Book. Miss S. Harvey has convincingly demonstrated that payments from royal estates which had to be 'blanched' (i.e. they were due in pure silver, by weight) were in many instances paid in coin by tale subject to a surcharge of 25 per cent, and that this is the meaning of the frequent references to payment in pence de xx in ora instead of the usual sixteen.<sup>6</sup>

## Shillings and wergilds

If the fourpenny and fivepenny shillings could be equated in value, the supposed disparity in the 'blood prices' (wergilds) of ceorl and thegn in Mercia and Wessex would disappear. In the laws of each kingdom the wergild of a ceorl is stated to be 200 shillings and that of a thegn 1,200 shillings. The so-called 'Laws of William', dating from the early twelfth century, refer baldly to the wergild of a thegn as twenty pounds in Mercian law and twenty-five pounds in West Saxon law,' but the lack of comment on the disparity in the figures may simply mean that the Norman scribe did not understand their

<sup>&</sup>lt;sup>1</sup> In practice, due to variations in the weight of the minted penny, this relationship may not always have been accepted—e.g. at Bosham in D.B. (see p. 204 above).

<sup>2</sup> EHD i, no. 34.

<sup>&</sup>lt;sup>3</sup> See Æthelred II's code issued at Wantage (EHD i, no. 43).

<sup>4</sup> EHD ii, no. 175.

<sup>5</sup> EHD ii, no. 71.

<sup>&</sup>lt;sup>8</sup> S. Harvey, 'Royal Revenue and Domesday Terminology', Economic History Review, 1967, pp. 221-8.

<sup>&</sup>lt;sup>7</sup> Liebermann i, p. 498, art. 8.

significance. The Mercian figure is in keeping with the 120 pounds which is given for a king's simple wergild according to Mercian law in a compilation on status that has been associated with Archbishop Wulfstan of York (1002–23). The compilation describes it also as equal to the wergilds of six thegns.<sup>1</sup>

It is, perhaps, a matter of some surprise that if there were any real difference in the Mercian and West Saxon wergilds it is not brought out in the treaties governing relations with the Danes. The treaty between Alfred and Guthrum Athelstan, which dates from 886–90, says that 'if a man is slain, all of us estimate Englishman and Dane at the same amount, at eight half-marks of refined gold, except the ceorl who occupies rented land, and their [the Danes'] freedmen; these also are estimated at the same amount, both at 200 shillings'. Æthelred II's treaty with the Viking army in 991 states that 'if an Englishman slays a Dane, a freeman a freeman, he is to pay for him with 25 pounds, or the actual slayer is to be surrendered; and the Dane is to do the same for an Englishman, if he slays one'. In the latter case the West Saxon wergild for a thegn is specified, and it seems reasonable to think, as H. M. Chadwick did, that the eight half-marks of gold laid down in Alfred's treaty were intended to be of the same order. In the latter of the same order.

Moreover, recent work by P. Grierson seems to have made it possible to explain away the much greater disparity which has always been thought to exist between the early Kentish wergilds and those of Mercia and Wessex. The wergild of an ordinary freeman in the Kentish law codes of the seventh century is set at 100 shillings, and that of a man of noble birth at 300 shillings.5 The laws of Wessex, up to the time of Alfred, have three classes of wergild-200, 600, and 1,200 shillings-but the middle one subsequently disappears. It has hitherto been thought that there was a correspondence between the Kentish nobleman of 300 shillings and the West Saxon thegn of 1,200 shillings, and that the Kentish coorl was therefore worth much more than the West Saxon coorl. Chadwick arrived at this conclusion by arguing that a Kentish shilling was divided into twenty sceattas, so that the Kentish coorl was worth 2,000 sceattas, while the Mercian shilling was reckoned at just over four sceattas, giving a value for the Mercian ceorl of only a little over 800 sceattas,6 He assessed the Mercian sceatt from the compilation on status to which reference has already been made, where the king's simple wergild, valued as we have seen at 120 pounds or 7,200 shillings, is also said to be worth 30,000 sceattas,7 But if the Kentish and Mercian shillings were different, as seems certain, why did Chadwick assume that the Kentish and Mercian sceattas were

Mr. Grierson has convincingly shown that the Kentish shilling and sceatt were weights of gold. He cites the very early poem known as Widsith for a reference to an armlet (beag) 'in which there was reckoned of refined gold 600 sceattas counted in shillings'. As he points out, the laws of Æthelberht were framed at the beginning of the seventh century when there was no local coinage. The code, as it has come down to us, is provided with an introductory statement that it was established in St. Augustine's days: Bede states that Æthelberht formulated, with the advice of his councillors, judicial decrees after the example of the Romans and written in the English language. Thus

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<sup>1</sup> EHD i, no. 52 (c).
<sup>2</sup> EHD i, no. 34.
<sup>3</sup> EHD i, no. 42.
<sup>4</sup> Chadwick, pp. 50 f. See also p. 216 below.
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EHD i, no. 30.

<sup>&</sup>lt;sup>6</sup> Chadwick, p. 19. <sup>7</sup> EHD i, no. 52(c).

<sup>8</sup> Widsith, lines 90-2, ed. R. W. Chambers (Cambridge, 1912), p. 217, where sceattas are translated as 'pieces'.
9 EHD i, no. 29.

<sup>&</sup>lt;sup>10</sup> Bede, Ecclesiastical History, in EHD i, no. 51 at p. 610.

Grierson says that originally the fines, expressed in shillings and sceattas, must have denoted weights of gold rather than coins—though presumably Merovingian tremisses were often used for convenience. When coins began to be minted in Kent it would have been natural to align them with the indigenous system of weights, and with the Merovingian coinage which conformed to it. Grierson therefore identifies the Anglo-Saxon coins in the Crondall hoard as gold shillings. As has been mentioned, they adhere very closely to a standard of 20 barley (Troy) grains. A sceatt, therefore, would have been a Troy grain of gold.<sup>1</sup>

By the time of Crondall—now dated by J. P. C. Kent to shortly after 640²—both Merovingian and Anglo-Saxon gold coins were heavily debased with silver. It may, however, be presumed that the shilling of the Kentish laws was 20 grains of pure gold, a weight identical with the Merovingian tremissis of a declared value of seven siliquae.³ As such it would have been worth one-third of the light-weight solidus. If this solidus, like the later mancus, can be equated with six shillings of silver, two of these shillings would have had the same value as the old Kentish gold shilling: thus the Mercian and West Saxon ceorl, rated at 200 silver shillings, would have had the same real value as the Kentish ceorl worth 100 gold shillings. The implication of this, as D. A. Bullough has pointed out, is that the Mercian and West Saxon thegn with a wergild of 1,200 shillings of silver would have been worth twice as much as the Kentish nobleman rated at 300 gold shillings.<sup>4</sup>

Why the term 'shilling' should have been transferred to a weight of silver which was worth only half a Kentish golden shilling must remain something of a mystery. Grierson thought it had to do with the debasement of the minted Kentish shilling, and this may well be the explanation.

## The development of a monetary economy<sup>5</sup>

Before we jump too firmly to conclusions about the pounds of the Mercian and West Saxon law codes it would be as well to remember that the specific evidence for a relationship of 300 pence to a fifteen-ounce pound of silver comes from a period when the use of coin by tale was established throughout the country, and money was issued and exchanged at mints up and down the land. The system of frequent changes of the coinage which could be regarded as current (i.e. acceptable by tale) dates back only to a date towards the end of Edgar's reign, and under it the weight of the penny varied on either side of the eventual late Norman pennyweight of 24 Tower or  $22\frac{1}{2}$  Troy or (perhaps) 32 wheat grains (1.46 g.)6. If this system is still only partially understood, we have even less knowledge of the earlier development of the use of coin by tale. It is probable that the bulk of the English coinage south of the Humber before c. 860, and perhaps as late

- <sup>1</sup> P. Grierson, 'La Fonction sociale de la monnaie en Angleterre aux VII°-VIII° siècles', in *Moneta e* scambi nell'alto Medioevo, Spoleto, 1961.
- <sup>2</sup> J. P. C. Kent, 'Problems of Chronology in the Seventh Century Merovingian Coinage', *Cunobelin*, 1967, pp. 24–30 at p. 29.
  - <sup>3</sup> See above, p. 206.
- <sup>4</sup> D. A. Bullough, 'Anglo-Saxon Institutions and Early English Society'. *Annali della Fondazione italiana* per la storia annninistrativa, vol. 2 (Milan, 1965).
- pp. 647-59, at p. 651.
- 5 This section has been added since the Address was delivered.
- 6 These deliberate and sometimes drastic changes in weight, both upwards and downwards, are too complex to discuss here. For an extensive analysis see H. B. Petersson, Anglo-Saxon Currency (Lund, 1969). Petersson's interpretation of them by reference to a development of Bolin's theory of overvalued currency should, however, be treated with some reserve.

as c. 886, was produced at mints in Kent and East Anglia. There is no evidence during this time for a mint in Mercia outside London, and the output of the London mint seems generally to have been exiguous, at least before the reign of Burgred.<sup>1</sup>

Any interpretation of monetary payments or fines must therefore be made against the numismatic evidence that the use of coins for internal trade, as measured by the establishment of mints outside south-east England, only became widespread after the Treaty of Wedmore. The development seems to have been quite rapid, judging by the extensive imitation of Alfred's coinage in the Danelaw and by the introduction of a coinage of silver pennies in Danish Northumbria to replace the miserable copper 'stycas' of the old Northumbrian kingdom.<sup>2</sup> Athelstan's laws promulgated at Grately, in which each borough in Wessex is entitled to at least one moneyer, may mark the completion of one stage in this development.<sup>3</sup>

The transition is accompanied by regulations of various kinds governing trade and coinage. The Grately laws lay down that no goods worth more than twenty pence are to be bought outside a town, but must be bought there in the witness of the town-reeve or of another trustworthy man, or in the witness of the reeves at a public meeting. A code of Edgar makes provision for purchases made at a distance to be declared to the purchaser's neighbours. Cnut requires that no one is to buy anything worth more than fourpence, whether livestock or other goods and whether in town or country, without the trustworthy witness of four men. Laws against false and defective coining are also developed, coupled with the requirement that no one shall refuse money of the proper weight, in whatever town in the kingdom it may have been minted. Eventually, in the reign of Henry I (though this may, of course, represent a restatement of traditional practice), we find moneyers being prohibited from reminting money except in their own county, and no one except a moneyer being allowed to change money.

If the general development of a monetary economy began after Alfred's acquisition of English Mercia, the change in the pattern of metrology which took place at that time may have a bearing on it. The coins of the Kentish mints from the early ninth century have a median weight of about 21 grains (1·36 g.). This weight is maintained in the East Anglian coinage throughout the century, and is also the median weight of the post-Wedmore coins of Guthrum Athelstan and of the Northumbrian (Cuerdale hoard) Vikings. The mid ninth-century coins of the kings of Wessex and Mercia, however, have median weights in the region of 20 grains (1·30 g.); as in East Anglia, barely one coin in ten exceeds 22 grains (1·43 g.). With Alfred's later coinage, if one excludes the Danelaw imitations, the median weight rises to more than 24 grains (1·56 g.) and Edward the Elder's coins fully maintain this weight, as do Athelstan's mint-signed issues. Subsequently there is a decline, and barely one in ten of the weights of Eadred's coins in *BMC* exceeds 24·0 grains.

<sup>&</sup>lt;sup>1</sup> See my Presidential Address of last year (BNJ xxxvii, pp. 216-38) for a discussion of ninth-century coinage and the status of the London mint.

<sup>&</sup>lt;sup>2</sup> See the papers on these coinages in *Anglo-Saxon Coins*, ed. Dolley (London, 1961), pp. 77-121.

<sup>&</sup>lt;sup>a</sup> II Athelstan, art. 14. 2 (EHD i, no. 35).

<sup>&</sup>lt;sup>4</sup> For a general discussion see H. R. Loyn, 'Boroughs and Mints, A.D. 900–1066', in *Anglo-Saxon Coins*, pp. 122–35.

<sup>5</sup> II Athelstan, art. 12.

<sup>6</sup> IV Edgar, art. 7-11 (EHD i, no. 41).

<sup>7</sup> II Cnut, art. 24 (EHD i, no. 50).

<sup>8</sup> IV Æthelred, art. 5-9 (Liebermann, i, pp. 234-6).

<sup>&</sup>lt;sup>9</sup> Henry I: Decree concerning the coinage (Liebermann, i, p. 523).

<sup>10</sup> Weights derived from BMC, vols. i and ii.

<sup>&</sup>lt;sup>11</sup> e.g. taking the 'clean' types, *BMC* xv, xx, xxi, thirteen out of sixteen coins weigh between 24·0 and 24·6 grains.

<sup>12</sup> See above, p. 208.

What was the object of Alfred's monetary reform (for such there must have been)? Was the increase in weight designed to enable a penny to pass as the equivalent of a pennyweight of silver? If so, it seems to have failed in the long run, though for a time a payment of four pence may conceivably have been accepted as worth a shilling both in Mercia and Wessex. During this period a pound of currency must have approached 6,000 grains (389 g.). If we think in terms of an original currency ounce of twenty light (i.e. 20-grain) pence, which at 26 g. would be about 4 per cent lighter than the Roman ounce, Alfred's pound can be seen as containing fifteen ounces rather than twelve.

Although on the Continent a pound of silver seems to have contained fifteen ounces before Charlemagne's reform,<sup>3</sup> the first specific reference to a fifteen-ounce pound in the context of English coinage is not found until a century after Alfred. It occurs in the code of laws known as IV Æthelred, which has survived only in the Latin of the early twelfth-century compilation called *Quadripartitus*. Article 9.2 has been translated, without conveying any very clear meaning, as follows:<sup>4</sup>

And those who have the charge of towns shall see to it, under pain of incurring the fine for insubordination to me, that every weight is stamped according to the standard employed in my mint; and the stamp used for each of them shall show that the pound contains 15 ores.

Liebermann's text for the crucial passage is ut omne pondus sit marcatum ad pondus pecunia mea recipitur; et eorum singulum signetur ita, cur xv ore libram faciant. He does, however, indicate that different readings are found in other manuscripts. One of these, the Brompton MS., gives it as ut omne pondus ad mercatum sit pondus quo pecunia mea recipitur . . ., in which form the passage could be translated with more meaning as ordering

... that every market-weight is the weight by which my money is received; and each one is stamped thus, that 15 ores make a pound.

Thus Brompton's version infers that the mercantile pound to be used in the market of a borough was to be identical with the pound weight on which the king's money was received (by the moneyers, when exchanging old money for new?). If he is right, and if an ora and an ounce were synonymous, this pound may also have been related to the heavy pounds of Domesday and of David I.<sup>6</sup>

The ratio of gold to silver, and the weight of the shilling

We have little positive information from which to deduce the relative values of gold and silver in Anglo-Saxon England. Chadwick compared the weight of pennies of

- <sup>1</sup> See below, p. 222, for a probable Carolingian precedent.
- <sup>2</sup> The London ordinance referred to on p. 209 appears to be reinforced by a charter to which Mr. H. E. Pagan has kindly drawn my attention, namely Birch 648 (Sawyer 1417). The clergy of the New Minster at Winchester lease some land at Chiseldon, Wilts., to a thegn of Athelstan's for eighty mancuses of gold, and for an annual rent of eighty solidi ex meris denariis (i.e. shillings in pence of fine silver). For non-payment of rent there is a fine of sixty denarii for the first offence, thirty solidi for the second, and the property is to be forfeited if the rent is still not paid. If the
- second fine is twice the first (which, of course, it may not be), the implication is that four pence make a shilling.

  3 See below, p. 220.
- <sup>4</sup> A. J. Robertson, The Laws of the Kings of England from Edmund to Henry I (Cambridge, 1925), p. 79.
- <sup>5</sup> Liebermann, i, p. 236–7. He translates the passage more literally than Robertson, viz. dass jedes Gewicht gezeichnet werde, gemäss dem Gewicht, wonach meine Münze angenommen wird; und deren jedes werde so gezeuchnet, dass 15 Ör ein Pfund ausmachen.
- <sup>6</sup> Liebermann in his work on *Quadripartitus* (1892), p. 71, says Brompton comes from a lost MS. from at least no later than 1150.

Edward the Elder with the supposed weight of the mancus  $(71\frac{1}{2} \text{ grains}, \text{ or } 4.63 \text{ g.}, \text{ on}$  the strength of an Arabic derivation which cannot now be sustained). He commented that 'if the mancus was at this time already regarded as the equivalent of 30 pence and if, as is extremely probable, the ratio of gold to silver at the same time was 10:1, there would be a natural tendency to make the penny equal to one-third of the mancus in weight'.¹ As we have seen, there is evidence that the minted mancus and the minted penny did have this weight ratio, though Chadwick was thinking in terms of a fixed, not a variable, mancus. But a ten-to-one ratio of pure gold to pure silver cannot necessarily be deduced from it, unless we can be sure that the same proportion of both gold and silver bullion was retained by the moneyers when they converted it into current coin.

On the Continent Charles the Bald, in article 24 of the Edict of Pîtres (864), specified a ratio of twelve to one between refined gold and minted silver, viz. ut in omni regno nostro non amplius vendatur libra auri purissime cocti, nisi duodecim libris argenti de novis et meris denariis. The article continues as follows: Illud vero aurum, quod coctum quidem fuerit, sed non tantum ut ex eo deauratura fieri possit, libra una de auro vendatur decem libris argenti de novis et meris denariis. Prou thought it reasonable to conclude from this that the relationship between minted gold and minted silver was ten to one or thereabouts,² though the evidence of the coins of Louis the Pious suggests that this ratio, too, was twelve to one.³ Here again we are not given any information about the relative values of unminted gold and unminted silver.

In England the first explicit relationship we appear to have is to be found in the Pipe Rolls of Henry I. We have already seen that a mark of silver is used there as a term synonymous with 160 pence in money. So, too, a mark of gold is used to denote £6, thus: 'Roger, son of Osbert the priest, accounts for half a mark of gold in respect of the grant of the land and of the churches of his father. He has paid 60 shillings in the Treasury in respect of this half mark of gold. And he is quit. Now £6 by tale for a mark of gold and 13s. 4d. by tale for a mark of silver clearly indicates a ratio of nine to one between the pure metals unless the two marks differed in weight. But it would be rash to say that a figure applicable to the mid twelfth century can be adduced as evidence for the ninth and tenth centuries. Is there any other source which can help?

If sixty Anglo-Saxon shillings made a fifteen-ounce pound of silver, a shilling would have been rated at  $\frac{1}{4}$  ounce. Chadwick drew attention to the fact that certain early charters equated the shilling of silver with the *siclus*. This was synonymous with  $\frac{1}{4}$  ounce in Roman times, and so ought to have weighed 6.75 g. (104.2 grains)  $\pm 1$  per cent. A figure of this order seemed to Chadwick to fit the maximum weight of pennies of Edward the Elder, taking them at four to the shilling. At the time of the relevant charters, however, it would have taken five lighter pence to make up the same weight. If the shilling of silver were indeed a fixed weight of one-quarter of an Anglo-Saxon ounce, six shillings would weigh  $1\frac{1}{2}$  ounces. A mancus of gold, if worth six shillings, would weigh one-sixth ounce if the ratio between the metals were nine to one. This is plausible, because the

<sup>1</sup> Chadwick, pp. 11 and 42.

<sup>&</sup>lt;sup>2</sup> M. Prou, *Monnaies carolingiennes* (Paris, 1896), p. xxxiii.

<sup>&</sup>lt;sup>3</sup> See p. 222 below. <sup>4</sup> See p. 210.

<sup>&</sup>lt;sup>6</sup> EHD ii, no. 71, p. 573. These shillings are, of course, of twelve pence.

<sup>&</sup>lt;sup>6</sup> He quotes (op. cit., pp. 43-4) a West Saxon charter of the Mercian queen Æthelswith dating from 868 (Birch, 522) which reads pecunia . . . hoc est mille quingentis solidis argenti et auri vel quindecies centum siclis.

<sup>&</sup>lt;sup>7</sup> See p. 206. <sup>8</sup> Ibid., p. 39.

gold solidus was reckoned at six to the Roman ounce. On the other hand, a lighter mancus of 0.15 oz., weighing three silver pence at five to the shilling and twenty to the ounce, would result from a ratio of ten to one. The difficulty is that such a mancus would weigh only 2.4 heavy pence at four to the shilling and sixteen to the ounce—less, in fact, than the minted mancus of Edward the Elder.

On the same reckoning of four shillings to the ounce, 1,200 shillings would be 300 Anglo-Saxon ounces of silver. In gold the equivalent would be 33\frac{1}{3} ounces if the ratio were nine to one and 30 ounces if it were 10:1. Alfred's treaty with Guthrum Athelstan refers, as we have seen, to a payment of eight half-marks of refined gold in circumstances in which 1,200 shillings of silver might have been expected to be specified.\(^2\) As far as we can tell, eight half-marks would have amounted to thirty-two ores, which is as close as one could get to either figure, reckoning in half-marks, assuming that an ora and an ounce are synonymous. The answer must remain in doubt, though I am inclined to prefer ten to one.

The evidence adduced for a shilling of silver having represented \( \frac{1}{4}\)-ounce would suggest a weight for the shilling of around 100 grains (6.48 g.) originally, but nearer to 112.5 grains (7.29 g.) in the tenth and eleventh centuries.\( ^3\) The latter weight, if divided into five light pennyweights of 22\( \frac{1}{2}\) grains (1.46 g.), would give a result consistent with the subsequent Tower pennyweight but exceeding the weight-standard of the Domesday penny by about 5 per cent.\( ^4\) If divided into four heavy pennyweights of 28\( ^1\) grains (1.82 g.) it would exceed by about the same margin the highest weight-standard reached by the penny after Edgar's reform.\( ^5\) It seems unlikely that these correspondences can be purely fortuitous, though their significance may only become apparent when the currency system established by Edgar's reform is more fully understood.\( ^6\)

## Sceattas and thrymsas7

Of the units mentioned in the law codes, we are left with sceattas and thrymsas. These are the names traditionally assigned by numismatists to the silver and gold coins issued before the time of Offa. But the sceatt, on Grierson's theory, was originally a barley grain of gold. If the compilation on status attributed to Wulfstan is to be believed, it became valued in Mercia at 250 to the pound of silver. Can the two values be reconciled?

Chadwick thought that Mercian sceatt and Mercian penny were to be regarded as

- ¹ However, if the mancus originally weighed 60 grains this argument leads to an ounce of only 360 grains (23·3 g.). I put forward that figure when I delivered this Address, but it implies an original pennyweight of silver of 22½ grains (1·46 g.), with sixteen pennyweights to the ounce and a fifteen-ounce pound of only 5,400 grains. The Carolingian evidence, at least, seems at variance with this—see Appendix.
  - <sup>2</sup> See above, p. 211.
- <sup>3</sup> The corresponding ounces are 400 grains (25·9 g.) and 450 grains (29·2 g.) respectively.
  - 4 See above, p. 204.
- <sup>5</sup> Pence were clearly struck to a standard close to 27 grains (1.75 g.) at the commencement of most of

- the issues of Æthelred II, and for a short time under Edward the Confessor—apparently due to the abolition of *heregeld*: see the tables and diagrams in Petersson, op. cit.
- <sup>6</sup> See R. H. M. Dolley and D. M. Metcalf, 'The Reform of the English Coinage under Edgar', *Anglo-Saxon Coins*, pp. 136-68, and the discussion by Petersson, op. cit., pp. 72-87.
- <sup>7</sup> It will be apparent that I could not have prepared this section without extensive help from Professor Whitelock. This is not to say that she necessarily accepts my conclusions, which largely depend on arguments developed earlier in this Address.

synonymous. As he put it, 'it would of course be absurd to suppose that there was a contemporary currency of sceattas and pennies differing from one another by only 4 per cent'.¹ But was this sceatt a silver coin or a silver weight? Rating a pound of silver at ten mancuses of gold, or thirty Kentish shillings, a Mercian sceatt would seem to be worth just under one-eighth of a Kentish shilling, or 2-4 grains of gold. It is hard to see how such a value could have come about. Nor is it easy to find a reason for the name 'sceatt' being given to a silver weight or coin of about 20 grains.

A clue to an alternative approach may lie in the Lindisfarne Gospels, where the Latin dragmas decem in Luke 15: 8 is glossed in the late tenth century as fif sceattas teasiōum, or ten times five sceattas. A drachm has traditionally been regarded as equivalent to one-eighth ounce, and still has this value in the apothecaries' (Troy) scale. If five sceattas amounted to this fraction of an Anglo-Saxon ounce of silver a single sceatt would have been one-fortieth of an ounce, or say ten grains taking the ounce at 400 grains. If the ratio between the metals were ten to one, this sceatt would have had the same value as a Kentish sceatt of one grain of gold. At a fortieth of an ounce it would also have been a tenth of a shilling of silver, and so would have been equivalent to a halfpenny. It is therefore worth noting that in another context 'sceatt' is used to translate obulum, the half of a denarius.

Unfortunately these glosses are not conclusive. Professor Whitelock, who kindly supplied me with them, has pointed out to me that the lost dragma of the story in Luke 15 is glossed in v. 8 as casering<sup>5</sup> and in v. 9 as 'that shilling'. On the face of it this implies that five sceattas made a shilling, but it is possible that the word 'shilling' is here being used in the general sense of a coin, a meaning which could hardly be conveyed by 'five sceattas'. Thus in the source where obulum is glossed as sceat the same term (var. obelus) is elsewhere glossed as scilling. A full study of glosses of ancient denominations and weights might throw further light on this subject, and in particular on what Wulfstan understood by the sceattas he used in describing the Mercian king's wergild. For the present all one can say with confidence is that the word 'sceatt' is most commonly used where its meaning is simply money, or silver money, and that there is no real evidence that it was ever thought of as a denomination of coin.

Wulfstan's compilation on status expresses the wergilds in the 'law of the north people' (noröleoda laga) in thrymsas. It has been thought that this thryms is to be equated with three pence, since it is stated that 'a ceorl's wergild is 266 thrymsas, which is 200 shillings according to the law of the Mercians'. If so, the rest of the wergilds are not in the proportions we know from other law codes. The other main class, that of a mass-thegn (priest) and a secular thegn, has a wergild of 2,000 thrymsas, which is seven

- <sup>1</sup> Chadwick, op. cit., p. 13 n.
- <sup>2</sup> Evangeliorum quattuor Codex Lindisfarnensis, ed. T. D. Kendrick and others (Olton and Lausanne, 1956-60), fo. 179R.
- <sup>3</sup> The origin may lie in the Neronian denarius, which weighed one-eighth of a Roman ounce. Four such denarii were approximately equivalent to an Alexandrian tetradrachm.
- <sup>4</sup> Thomas Wright, Anglo-Saxon and Old English Vocabularies, 2nd edn. (ed. Wülcker), i, col. 462, line 17. (N. R. Ker has ascribed this gloss to the mid tenth century.)
- 5 i.e. a coin bearing Caesar's image.
- 6 In another tenth-century gloss (Wright-Wülcker, col. 1831, line 21), scylling glosses numisma.
  - <sup>7</sup> Ibid., col. 460, line 17.
- <sup>8</sup> EHD i, no. 52 (c).
- <sup>9</sup> EHD i, no. 52 (b).
- <sup>10</sup> *Trym* is the dative of Old English *Try*, 'three'. It seems unlikely that 'thryms' is related to the Latin *tremissis*; if it were, it ought to denote ten or even twelve pence. On the other hand, *trimes*, which is found as a weight in *Leechdoms* (see above, p. 205 n.), may well be derived from *tremissis*.

and a half times as large.¹ Above this level certain holders of office, such as a king's high-reeve, are valued at 4,000 thrymsas, and so on up to an atheling (15,000 thrymsas) and a king (15,000 thrymsas, and another 15,000 for the kingship). It seems worth pointing out that had the ceorl's wergild been 666 thrymsas the two main classes would have corresponded to the Kentish 100-shilling and 300-shilling wergilds on the basis of a thryms equal to three gold sceattas (barley grains) or their equivalent in silver.² Is it possible that there was a contemporary error of transcription (i.e. *cclxvi* for *dclxvi*)?

Be this as it may, we can probably dismiss from our minds any thought that either sceattas or thrymsas were denominations of coin in Anglo-Saxon England. Coinage, therefore, appears to have been limited to gold shillings in seventh-century Kent; occasional gold mancuses—unofficial and official—from the time of Offa to Edward the Confessor; and extensive issues of silver pence (and, occasionally, halfpence) from the end of the seventh century onwards.

## Conclusion3

To sum up, a possible view of the Anglo-Saxon monetary system is that it was founded in gold on the basis of a tremissis or shilling of one-twentieth ounce, three of which subsequently made a solidus mancus ('gold penny'). It was then developed in silver on the basis of a penny of one-twentieth ounce, five of which made a new shilling of  $\frac{1}{4}$  ounce of silver. This shilling of silver was valued at half the former shilling of gold, implying a ratio of ten to one between the metals. Ten pence were thus worth a shilling of gold and thirty pence a mancus, and the mancus was therefore minted to a weight of three pence. The gold shilling had been divided into twenty sceattas, each of which weighed a Troy (barley) grain of 0.0648 g. Thus a single sceatt was worth a halfpenny of silver, or 10 grains.

An ounce of coin was originally 400 Troy grains (25.9 g.), about 4 per cent lighter than the Roman ounce, though it was raised by about  $7\frac{1}{2}$  per cent towards the end of Offa's reign. Twelve ounces, containing 240 pence of full weight, constituted the standard currency ('West Saxon') pound of forty-eight shillings. Fifteen ounces, or 300 pence, made up a sixty-shilling commercial ('Mercian') pound of silver. However, the commercial pound was also divided into 240 heavy pennyweights, four of which therefore made a shilling and sixteen an ounce. For half a century after Alfred's acquisition of English Mercia, pence were actually minted to a weight approaching this level except in areas under Viking rule, and four pence may have been taken for a payment of a shilling. This does not appear to have been the case when, during the reigns of Edgar, Æthelred II, and Edward the Confessor, pence were periodically struck at a heavy weight, probably because the average weight of pence in circulation was usually much lower.

In the tenth and eleventh centuries the Danish ora was generally used as a unit in

and Serrure (Traité de numismatique du moyen âge, i, p. xxxvii) refer to a troisken or troisquin as the 1,280th part of an 8-ounce Flemish mark of 246·1 g., thus 0·192 g. It therefore appears to denote three barley grains, which may be a sign of early date since that mark came to be regarded as containing 5,120 wheat grains, not 3,840 barley grains.

<sup>&</sup>lt;sup>1</sup> If a thryms is three pence, 266 thrymsas represent a 'Mercian' ceorl's wergild of 200 shillings, taking a shilling at four pence, and 2,000 thrymsas a 'West Saxon' thegn's wergild of 1,200 shillings, taking a shilling at five pence. This is hardly a satisfactory reconciliation, and is of course incompatible with the view expressed above that the 'Mercian' and 'West Saxon' shillings were of the same weight.

<sup>&</sup>lt;sup>2</sup> In what may perhaps represent a parallel, Engel

<sup>3</sup> Added since the Address was delivered.

place of the ounce. As a weight of silver it seems to have been synonymous with an ounce of sixteen heavy pennyweights, but in accounting for pence it was also a unit of sixteen, not twenty as in the case of the ounce. So the currency pound and the pound of silver each contained fifteen ores, but the ores differed in weight. This meant that if a payment due in silver by weight was to be discharged in pence by tale it had to be made at the special rate of twenty pence for each ora due.

Eight ores made a mark. (Curiously, fines in the Danelaw were related to a half-mark.) When in Norman times the use of the accounting ora was discontinued in favour of shillings of twelve pence, the term 'mark of silver' was retained as a synonym for eight ores of pence at twenty to the ora. Seemingly the ratio between the metals had fallen to nine to one, since a 'mark of gold' was worth nine marks of silver.

By the middle of the twelfth century a sum of 160 pence, or 13s. 4d., was simply called a mark. The scales of weights now counted twenty sterling pence to the ounce, and the weight of an ounce of coin had risen to about 450 Troy grains (29·2 g.). The use of a fifteen-ounce pound in the context of coinage had been discontinued.

An explanation on these lines undoubtedly fits a large number of documentary references to coins and to weights of precious metals. It does, however, create problems of its own, such as the interpretation of the compilation on status attributed to Archbishop Wulfstan, and it stops short of accounting for the variations in the weight of the minted penny.<sup>2</sup> It should therefore be regarded as no more than a hypothesis, and must be subjected to rigorous analysis by numismatists and historians alike.

## Summary Table of Suggested Values

Metal	Unit, and whether coin (C), accounting unit (A) or weight (W)	Number of ideal units to an ounce
Gold	Sceatt (Kentish) (W)	400
111	Thryms (?) (W?)	133 (?)
12	Shilling (Kentish) $(C, W)$	20
27	Mancus (C)	$6\frac{2}{3}$
.11	Mancus $(W)$	63 (?)
Silver	Penny $(C, A)$	20
**	Penny (W)	16
**	Shilling (Mercian and West Saxon) (A, W)	4
e33	Ora (A)	1 1
33	Ora $(W)$	1
,,	Mancus (A)	8

## Acknowledgements

In concluding this Address, I freely acknowledge a very large debt of gratitude to three scholars, Professor Dorothy Whitelock, Mr. P. Grierson, and Mr. P. H. Sawyer. They kindly read a draft, and not only criticised it and encouraged me to go ahead with it but also helped me with many important references. These produced some missing

coin-weights. One of Alfred (163·1 g.) may be the weight of 120 pre-reform pence; another of Edward the Confessor (37·61 g.) is less easy to explain. Michael Dolley at one time regarded these weights as trial pieces—see BNJ xxvii, pp. 175-8.

<sup>&</sup>lt;sup>1</sup> Payments were expressed in marks of pure or white silver in Kentish charters of Cnut's reign (e.g. Anglo-Saxon Charters, ed. A. J. Robertson, Cambridge, 1956, nos. LXXIX and LXXXVI).

<sup>&</sup>lt;sup>2</sup> For this reason I have not discussed the surviving

pieces of the puzzle I was seeking to solve. To many others, both numismatists and historians, with whom I have discussed problems in this area over several years, I am also greatly indebted. Finally I must thank my wife who, by presenting me with some essential volumes of source material at a critical stage, saved me many visits to public libraries which would have been quite impracticable in the time available.

#### APPENDIX

## The Carolingian Evidence

I DO not regard myself as a competent authority on the Carolingian sources, but I think that the Anglo-Saxon evidence may throw some light on the nature of Charlemagne's reform of weights and coinage c. 790 and may make the interpretation of some familiar documents clearer. I therefore offer the following analysis for what it may be worth.

There are two sources which seem to suggest that before the reform the Anglo-Saxon ratio of five to four applied in Francia also. Prou quotes a document from Aquitaine, dating from c. 845, which refers to 300 coins by number, or 25 solidi of account, making the former pound. It is inconceivable that pre-reform deniers were still circulating in 845, and the writer must surely be referring to a relationship that formerly existed. It would seem therefore that 300 denarii were regarded as equivalent to a pound of silver, implying a pound of, say, 389 g. (6,000 grains) on the basis of a denarius of 1-296 g. (20 grains).

This is supported by the Capitulare Episcoporum of c. 780, which has been the subject of much discussion, most recently by D. M. Metcalf and H. A. Miskimin.<sup>2</sup> Prou says that a famine had decimated the kingdom, and that the capitulary laid down a scale of almsgiving designed to appease the divine anger.<sup>3</sup> The relevant part, as quoted by Metcalf, reads as follows:

Et unusquisque episcopus, aut abbas, vel abbatissa, qui hoc facere potest, libram de argento in elemosinam donet; mediocres vero mediam libram; minores solidos quinque... Comites vero fortiores libram unam de argento aut valentem, mediocres mediam libram, vassus dominicus de casatis ducentis mediam libram, de casatis centum solidos quinque, de casatis quinquaginta aut triginta unciam unam et faciant biduanas, atque eorum homines in eorum casatis; vel qui hoc facere possunt; et qui redimere voluerit, fortiores comites uncias tres, mediocres unciam et dimidiam, minores solidum unum.

Thus three scales are specified, the first two of which run 'pound of silver, half pound, five solidi' and the third 'three ounces, one-and-a-half ounces, one solidus'. If it can be assumed that the third scale is in strict proportion to the others, it must be in the ratio of one to five and a pound of silver must contain fifteen ounces. Prou pointed out that in a Beauvais manuscript the reference to  $1\frac{1}{2}$  ounces in the third scale is replaced by denarios triginta: this implies 300 denarii to the same pound. Again, if it can be assumed that the first two scales run in the ratio  $1:\frac{1}{2}:\frac{1}{4}$  the pound must contain 20 solidi; if the third scale runs similarly, the other relationships must also apply. The document from Aquitaine is not necessarily contradicted: its twenty-five solidi are clearly accounting

<sup>&</sup>lt;sup>1</sup> Et trecenti tales nummi antiquam per viginti et quinque solidos efficiunt libram—Mabillon, vetera analecta, as cited by Prou, op. cit., p. xxxvii.

<sup>&</sup>lt;sup>2</sup> D. M. Metcalf and H. A. Miskimin, 'The Carolingian Pound: a Discussion', *SNC* lxxvi (1968), pp. 296-8 and 333-4. This discussion stemmed from a previous article by Professor Miskimin, 'Two Re-

forms of Charlemagne? Weights and Measures in the Middle Ages', *Economic History Review*, 2nd ser., xx (1967), pp. 35–52.

<sup>a</sup> Prou, op, cit., p. xxx.

<sup>&</sup>lt;sup>4</sup> This is a solidus of silver, worth not more than half a solidus mancus of gold—cf. the gold and silver shillings in Anglo-Saxon England (p. 212 above).

<sup>5</sup> Ibid., p. xl.

units, but the capitulary of bishops seems generally to be expressed in units of weight.<sup>1</sup> A solidus-weight of  $\frac{3}{4}$  ounce, rated at fifteen deniers by tale, would be consistent with an Anglo-Saxon shilling of  $\frac{1}{4}$  ounce, rated at five minted pence.

Professor Miskimin, however, has claimed that the pre-reform pound contained only eight ounces,2 He relies for this on the second scale of the Capitulare Episcoporum which, as the text already quoted shows, contains a subsidiary tariff bringing in a fourth class. Thus a vassal with 200 casati must pay the middle rate of half a pound, a vassal with 100 casati five solidi, and one with fifty or thirty casati a special rate of only one ounce. If an ounce is half of five solidi—in other words, if the lowest payment in the tariff is based on fifty casati—there must have been eight ounces to a pound of twenty solidi, and this is Miskimin's argument. If, on the other hand, there were really fifteen ounces to a pound, and the lowest payment was based on thirty casati, a vassal of 200 casati would have paid 7½ ounces and one of 30 casati should, in strict proportion, have been assessed at an ounce and an eighth, which is near enough to the actual assessment of one ounce. Further, the awkward reckoning of fifteen ounces to the pound would explain the varying units in which the dues were expressed. If the pound contained eight ounces, would not the payment of the vassal of 100 casati have been stated as two ounces? Miskimin has to deny that the tariffs in the third scale for fortiores, mediocres, and minores are in the ratio of  $1:\frac{1}{2}:\frac{1}{4}$  in order to prove his case.<sup>3</sup> The balance of the evidence seems to be against him.

What, then, was Charlemagne's reform? It did, of course, extend far beyond coinage. His general admonition of March 789 makes clear that he was concerned to ensure the use of correct and uniform measures and true and uniform weights everywhere, whether in town or monastery, whether in giving or receiving. Various estimates have been made of his ideal currency pound, on the basis of the weights of surviving denarii. Unfortunately these weights vary considerably, and in view of the uncertainty which still surrounds the classification and chronology of Carolingian coinage it may be more useful to approach the problem indirectly. One possible avenue is by way of the gold coins of Louis the Pious which bear the inscription Munus Divinum. These have been dated by Grierson to the early years of Louis's reign, c. 816.7 Their weights, like those of the earlier quasi-imperial solidi, are remarkably stable but they are appreciably heavier. Eight out of ten of the normal pieces listed by K. F. Morrison and H. Grunthal<sup>8</sup> weigh between 4·32 and 4·41 g. and have an average weight of 4·36 g., very close to the Byzantine solidus; of the other two, one (Grierson's) is mounted and the other is clipped. If we assume that these coins were minted as 'new' mancuses of the value of thirty new denarii, and the other is clipped.

- A different pound seems to have been used in minting, for another capitulary of Pepin lays down that the pound weight is to contain not more than twenty-two solidi of which the moneyer may retain one, viz. De moneta constituimus similiter ut amplius non habeat in libra pensante nisi xxii solidos et de ipsis solidis monetarius accipiat solidum i et illos alios domino cujus sunt reddat—see Prou, op. cit., p. xxix, note 3. If these were solidi of account the mint pound must have weighed 264 denarii, or, say, 343 g. (5,280 grains); if they were solidi of silver it could have weighed 330 denarii, or, say, 429 g. (6,600 grains).
- Metcalf and Miskimin, art. cit., pp. 296 and 333.

- 3 This implies a denial that the first and third scales are proportionate to one another.
  - 4 Prou, op. cit., p. xxxvi.
- <sup>5</sup> See K. F. Morrison and H. Grunthal, *Carolingian Coinage*, New York (1967), pp. 32–9.
- 6 See, for example, P. Grierson's review of Morrison and Grunthal in NC 1969, pp. 346-50.
- <sup>7</sup> P. Grierson, 'La Date des monnaies d'or de Louis le Pieux', *Le Moyen Age*, 1963, pp. 67-74.
  - 8 Op. cit., p. 159, no. 515.
- 9 In 815 Louis confirmed a charter of Charlemagne to San Zeno of Verona, in which it was specified that on the patronal festival the abbey should pay the bishop and clergy of Verona aut mancusos viginti aut

and if we take the ratio of gold to silver as twelve to one,<sup>1</sup> the corresponding weight of the contemporary denarius is twelve-thirtieths of 4.36 g., or 1.74 g. (26.9 Troy grains), with a margin of error of perhaps 1 per cent. Thus 240 new denarii should have weighed 417.7 g. (6,445 grains)±1 per cent. These figures agree exactly with Morrison's estimates based on the modal weight of non-portrait denarii of Louis. Do they have any meaning in themselves, or are they derived, by analogy with Pepin's decree, from a standard mint pound 10 per cent heavier, as Morrison suggests?<sup>2</sup>

Although the actual pound of currency was frequently lighter, the significance of a pound of the weight of 240 new denarii of about 1.74 g. appears to be underlined by the Carolingian weights which survive from north-west Europe. With perhaps one exception they seem to be multiples of a heavy ounce of about 35 g. (540 grains), though it is impossible to determine the precise value because of their corroded condition.<sup>3</sup> A pound of 420 g. (6,480 grains) would have contained twelve such ounces, each of the weight of twenty new denarii.<sup>4</sup>

The former ounce may be thought, from the capitulary of bishops, to have weighed twenty old denarii of full weight, or say 26 g. (400 grains). If fifteen of these ounces made up the old pound of silver, roughly sixteen would be needed to constitute Charlemagne's currency pound. By redividing his pound into twelve heavy ounces, each of twenty new denarii, Charlemagne could identify the minted denarius with the denarius-weight of one two-hundred-and-fortieth of a pound. Also, by equating the mancus with thirty new denarii he could give it a weight virtually on a par with the Byzantine gold solidus. Were these, in fact, his objectives, or are the results fortuitous? The new mancus, incidentally, would have been worth approximately forty old denarii of full weight—the relationship found between denarius and solidus in Salic law. It would thus have been worth roughly two ounces of the former silver pound, and would have weighed about a sixth of one of those ounces.

This argument, if valid, appears to demand a slight increase in the weight of the solidus of silver from fifteen old denarii (say 19-5 g., or 300 grains) to twelve new denarii (say 21 g., or 324 grains). Such an increase might conceivably explain the raising of the weight of the English penny to around 21 grains at the end of the eighth century. If so, what was it that prevented Offa from adopting Charlemagne's reform in full?

quinquaginta solidos argenti—Grierson, art. cit. ('Carolingian Europe and the Arabs'), pp. 1070-1.

- <sup>1</sup> The ratio stated in the subsequent Edict of Pitres—see p. 215.
  - <sup>2</sup> Morrison and Grunthal, op. cit., p. 58.
- <sup>3</sup> See Morrison and Grunthal, op. cit., pp. 61-2, and Metcalf and Miskimin, art. cit., p. 298.
- <sup>4</sup> It may be useful to record that an ounce of exactly 35 g. would contain 576 grains of English 'Tower' weight (0.0608 g.). This is not necessarily fortuitous, for the Roman ounce of c. 27 g. contained 144 carats, and in medieval Europe the carat was divided into four grains. We know, too, that there were 576 grains of 0.0531 g. in a French royal ounce (30.6 g.). It therefore seems possible that the 'Tower' grain was of Frankish origin. Its first recorded use in England is in the thirteenth century, when from a statute of 1280 we learn that the penny should weigh 24 grains, which were the same as the former 32 grains of wheat.

This former wheat grain would have weighed c. 0.0456 g. and 576 of them would have amounted to 26.3 g. (405 Troy grains), virtually identical with the presumed weight of twenty old Frankish denarii or, for that matter, twenty Kentish gold shillings. On the other hand, Grierson ('Money and Coinage under Charlemagne', in Karl der Grosse, i (Düsseldorf 1965), pp. 501-46 at p. 530) sees the new denarius as containing 32 Paris grains of 0.0531 g., making 1.70 g. On this reckoning, Charlemagne's currency ounce would have contained 640 Paris grains-compare the Flemish ounce (30.8 g.) of 640 grains of 0.048 g. and the presumed English Tower ounce (29-2 g.) of twenty pence at 32 wheat grains of 0.0456 g. However, the 640-grain ounce could perhaps have originated in the mint pound, if the difference between mint and currency pounds was intended to be 10 per cent. The subject is complex, and cannot be further developed here.

# THE PRESIDENT'S REVIEW OF THE YEAR

THIS year saw a landmark in the Society's history in the completion by Mr. Horace King of sixty years of membership. Elected in March 1909 he has quite the longest record of any member, past or present, and one which is unlikely to be surpassed for very many years. All the presidents the Society has had, including Mr. King himself, have held office during this period. All twenty-one Sanford Saltus medals have been awarded since he joined, one of them to him. He has given the Society unstinted service, and is only now, with the publication of the volume of the *Journal* currently in the press, relinquishing the office of Editor which he has held for seventeen years. As a token of our appreciation and affection that volume is being dedicated to him.

Mr. King's own studies have been primarily in the field of Anglo-Saxon coinage, which has attracted so much attention in recent years and, indeed, will be the subject of my own Address later this evening. It therefore gave me particular pleasure to present the Sanford Saltus medal earlier in the year to another past president, Mr. Edgar Winstanley, to whom it was awarded by the vote of the members last November for his work on the coinage of Henry VII. This is currently an unfashionable period of English coinage, though in recent years we have had papers covering the Scottish and Irish issues of the time. In putting together his final definitive study of Henry VII coins Mr. Winstanley was, of course, joined by Mr. W. J. W. Potter and it would be wrong of me to overlook the contribution Mr. Potter made.

At the September meeting I had the honour and privilege to present to Mrs. Wilson Peck the special award of the Sanford Saltus medal made posthumously to my distinguished predecessor in office.

The Society's affairs continue to flourish. Membership is again a record, with a total of 451 including those elected tonight. Of these, 323 are ordinary members and 113 are institutions. However, the number of junior members—15—is disappointing and I would appeal to all of you who are in contact with young numismatists to encourage them to apply for membership. We need to develop in them an interest in scholarly research if we are to survive as a live Society.

We have had one loss by death—Miss Carvell, who had only been a member for two years. New members, including those elected tonight, total 45.

This year's programme included a paper by Mr. Porteous on a subject which at first sounds foreign to our field, namely 'Coins of the Netherlands from the 13th to the 17th Century'. In fact the paper compared and contrasted this coinage with that of Great Britain, and demonstrated the importance of avoiding a purely insular approach. Mr. Dolley contributed an important if not entirely dispassionate paper on 'Anglo-Irish Monetary Policies, c. 1150–1625' but much to our disappointment he felt unable to leave Belfast because of the troubles there and the paper was read for him. A major contribution to the study of history and coinage north of the Humber was given by Mr. Pagan, who read to us on 'Ninth Century Northumbrian Numismatic Chronology'. The experiment begun last year was continued with a successful open evening on the eighteenth century, which was followed by the Council Sherry Party. Perhaps next year the

Director will be fortunate enough to take part in one of these evenings himself! Our programme was completed with papers by Dr. Kent and by myself, and with short papers on a variety of subjects.

A greater burden than usual has fallen this year on the Editors, and especially Mr. Blunt, because of the need to take a decision on the future printing of the *Journal*. For various reasons which I need not go into here it was decided, not without some reservations, that the situation had changed sufficiently to warrant our transferring the printing back to Oxford. This will undoubtedly restore the quality of production to which we used to be accustomed, but the improvement will have to be paid for. It is therefore of particular importance that authors should keep their papers as short as they can without loss of clarity, since although the Society's financial position is healthy we cannot afford to increase our expenditure on the *Journal* and we shall therefore be unable to print quite as much material as hitherto. Alterations in proof are another potential source of economy. Authors should restrain themselves as much as possible, and when it is necessary to make an alteration in the interests of factual accuracy the revised wording should be chosen with a view to minimizing the movement of type.

The efforts of our hard-working Librarian, Robert Thompson, have been rewarded by an appreciable increase in the use of the library which we share with the Royal Numismatic Society. Loans of books to members of the two societies in the year under review numbered 394. This exceeded by fifty the total for the previous year and by more than a hundred the total for 1965–6.

The residue of last year's allocation permitted the purchase of two back numbers of the *Numismatic Chronicle*, thus completing the Society's set. From this year's allocation the major purchase was the set of plates of the Pembroke collection (1746) from the numismatic library at Hardwick Court started by Archbishop Sharp. In addition to other purchases made from our normal allocation, a generous gift from Mr. Blunt enabled us to acquire three volumes of *Numismatic Notes* in manuscript by R. T. Samuel (for whom see *BNJ* xxxii (1963), pp. 171–3). A number of recent publications have also been donated to the library by their authors or publishers. A copy of the Librarian's complete report will be filed with the minutes of this meeting.

This year has seen the publication of an important general work by Mr. John Porteous entitled *Coins in History*. Beautifully printed and illustrated, it is both readable and scholarly and is a mine of information. Mr. Porteous has gone to great trouble in producing it, for he has travelled widely in search of material and has consulted extensively with other scholars. In this he sets an example to us all.

Other publications of note include H. B. A. Petersson's *Anglo-Saxon Currency*, a Swedish historian's study in depth of the metrology of the English coinage from the last years of Edgar's reign until the Norman conquest, and reprints of such works as *The Silver Token-coinage* by R. Dalton and *The Nineteenth Century Token Coinage* by W. J. Davis.

As part of the Sylloge of Coins of the British Isles a volume was published this year by Mr. Dolley, Mr. Blunt, and others covering the Anglo-Norman pennies in the Royal Coin Cabinet, Stockholm, and the collection of Anglo-Saxon and Norman coins formed for the University of Reading by the late Sir Frank Stenton. The publication of the latter collection was a fitting prelude to a highly successful National Numismatic Congress, held at the University in very pleasant surroundings. This was the first Congress pre-

sided over by Mr. Blunt as President of the B.A.N.S., and I am sure you will join me in wishing him a happy term of office.

This year's hoards include the astonishing find in Colchester of 14,000 thirteenth-century pennies of the *long cross* issue. The hoard was found in a bucket very close to the spot at which a hoard of *short cross* coins of similar magnitude was discovered in 1902. Miss Archibald will be reading a paper on the new hoard during the next session. Other hoards are listed in an appendix to this report.

In conclusion I should like to thank the officers and members of Council for the support they have continued to give to me during the past year. The work falls most heavily on the Secretary, Treasurer, Librarian, and Editors, and the Society is fortunate in having dedicated members who are prepared to give their time in this way. My task in guiding the Society is light by comparison, but would be impossible without them.

# **APPENDIX**

The English hoards for the twelve months ending on 31 October 1969 are as follows:

November 1968	Brentwood, Essex	308 silver coins, Edward I to Henry V. Found on a building site. Deposition <i>c</i> . 1422.
December 1968	Tintwistle, Cheshire	11 sovereigns, 34 half-sovereigns, 1835–78. Found under floorboards.
January 1969 (?)	Westmancote, Worcs.	56 gold and 2 silver coins, 18th century. Found under floorboards.
February 1969	Poringland, Norfolk	46 silver coins, 1816–51. Found in a hessian bag in a ceiling.
February 1969	Colchester, Essex	About 14,000 <i>long cross</i> pence, with Scottish and Irish. Found on a building site in a lead container. Deposition c. 1270–5.
March 1969	Seend, Wilts.	38 gold and silver coins, 1662–1719. Found in a trench.
March 1969	Cople, Beds.	35 silver coins, 1572–1680. Found in a ploughed field.
April 1969	Newent, Glos.	44 guineas, 1769–98. Found in a bag at the George Inn.
July 1969	Wantage, Berks.	264 sovereigns and half-sovereigns, 1859–1915. Found in a mustard tin.
September 1969	Uffington, Lincs.	49 silver coins, 1798-1820. Found in a trench.

In addition, Coins, Medals and Currency for 6 September 1969 reported the finding of 21 sword-shaped currency bars during excavations at Danebury Hill Fort, Hants.

To the previous year's record should be added the ninth-century hoard recovered during the summer and autumn of 1968 in excavations in the Abbey orchard at St. Albans, Herts. Of the 46 silver coins found, 45 were of the *lunette* type (23 Burgred, 19 Alfred, 2 Æthelred I, 1 Archbishop Ceolnoth) and one was a halfpenny of Alfred's *London monogram* type.

Hoards from other parts of the British Isles are being held over until the next volume of the Journal.

# THE BRITISH NUMISMATIC SOCIETY

# Balance Sheet as at 31 October 1968

1967 £		£ s. d.	£ s. d.	1967 £	£ s. d.	£ s. d.
25 5	Subscriptions received in advance . Subscriptions compounded		48 4 8 2 14 0		Investments at cost £900. 0s. 0d. 4½% Defence Bonds 900 0 0 £2,000. 0s. 0d. 6% British Savings	
154	Sundry Creditors and Outstanding Charges		97 4 6	900	Bonds 2,000 0 0	2,900 0 0
200	J. Sanford Saltus Medal Fund Capital Account		200 0 0	200	J. Sanford Saltus Medal Fund £200. 0s. 0d. 4½% Defence Bonds	200 0 0
250	Schneider Research Fund Journal Provisions	1,832 0 0	250 0 0	250	Schneider Research Fund Cash at Bank	250 0 0
2,850	1968	1,850 0 0	3,682 0 0	152 10	Library at cost Furniture at cost	151 12 5 10 7 6
716	General Purposes Fund Balance as at 31 October 1967 Excess of Income over Expenditure for the year	715 11 7 49 16 11	3,002 0 0	327 1,945 416	Cash at Bankers and in Hand Bank Current Account 800 11 5 Bank Deposit Account 733 0 4 Post Office Savings Bank	
710	tale for the year		765 8 6			1,533 11 9
£4,200			£5,045 11 8	£4,200		£5,045 11 8

## Report of the Auditors to the Members of the British Numismatic Society

We have obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purpose of our audit. In our opinion proper books of account have been kept by the Society so far as appears from our examination of those books. We have examined the above Balance Sheet and annexed Expenditure and Income Account which are in agreement with the books of account and no credit has been taken for subscriptions in arrear. In our opinion and to the best of our information and according to the explanations given to us, the Balance Sheet gives a true and fair view of the state of the Society's affairs as at 31 October 1968, and the Expenditure and Income Account gives a true and fair view of the excess of income over expenditure for the year ended on that date.

108a Cannon Street, London, E.C. 4 31 January 1969 GILBERTS, HALLETT & EGLINGTON

Chartered Accountants

# Expenditure and Income Account for the Year ended 31 October 1968

	EX	KPEN	DI	ITUR	E							INCOME
1966/7 £					£	s.	d.	£	s.	d.	1966/7 £	£ $s. d.$ £ $s. d.$
10	Printing and Stationer Expenses of Meetings	, Rent	, ar	nd				19	9	4	1,341	Subscriptions received for 1968 1,546 19 6 Subscriptions in arrear received
24	Library Facilities .							27			126	during year 153 13 2
95	Sundry Expenses .							76	2	9		1,700 12 8
	Journal Expenses:										30	Entrance Fees
			s.								40	Donations
		1,659	7	2							155	Interest received 207 10 2
	Less previous provisions	1,400	0	0							137	Sale of Back Volumes and Duplicates 140 0 9
	provisions	1,400			259	7	2				10	Buxton Prize Money 10 0 0
	1967 Journal Plate										52	Income Tax recovered
	Printing	132	0	0								
	Increase of pro- vision to £1,700	250	0	0	382	0	0					
	1968 Journal Plate				302	U	U					
	Printing	150		0								
	Provision	1,700	0	0								
					1,850	0	0					
					2,491	7	2					
	Less British				-,		_					
1,716	Academy Grant				150	0	0	2,341	7	2		
10	Buxton Prize Provision	on						10	0	0		
	Excess of Income over	er Exp	enc	diture								
36	carried to General	Purpo	oses	Fund				49	16	11		
£1,891								£2,524	13	8	£1,891	£2,524 13 8

# LIST OF NEW MEMBERS AND CHANGES OF ADDRESS

Additions and corrections to the list of Members published in vol. xxxvii of the Journal.

#### NEW MEMBERS

- 1969 CHAPMAN, G. E., Esq., 7 Oaklands Way, Sturry, Canterbury, Kent.
- 1969 DE CLERMONT, A. P., Esq., Flat 30, 7 Elm Park Gardens, London, S.W. 10.
- 1970 Delme-Radcliffe, Mrs. M., The Pond House, Aldbourne, Marlborough, Wilts.
- 1969 FREEDMAN, D. S., Esq., 6 Strathmore Court, Park Road, London, N.W. 8.
- 1969 GASPAR, Dr. P., Department of Chemistry, Washington University, St. Louis, Missouri, 63130, U.S.A.
- 1969 GILBOY, C. F., Esq., Department of Earth Sciences, The University, Leeds 2, Yorks.
- 1969 Hamilton-Sharp, Miss J., 64 Great Portland Street, London, WIN 5DH.
- 1969 HILL, D., Esq., Department of Archaeology, The University, Southampton, SO9 5NH.
- 1969 ILSLEY, R. C., Esq., 21 Tantallon Road, Balham, London, S.W. 12.
- 1969 Letch, T. A., Esq., 121 Cranleigh Gardens, Southall, Middlesex.
- 1969 MONTROLL, Mr. E., 120 S. Main Street, Pittsford, N.Y. 14534, U.S.A.
- 1970 ROBERTSON, T. J., Esq., 3 Rosemont Court, Rosemont Road, Acton, London, W. 3.
- 1969 SAUNDERS, N. J., Esq., High Heathers, Beacon Gardens, Crowborough, Sussex.

#### JUNIOR MEMBERS

- 1970 HENEAGE, Mr. T. P. W., North Carlton Wall, Lincoln.
- 1969 HOURIHAN, Mr. R., 7914 S. Mozart, Chicago, Illinois 60652, U.S.A.
- 1969 POWER, Mr. P., 206 Telford Avenue, Stevenage, Herts.
- 1970 WILLIAMS, Mr. D. M., 113 Aragon Road, Morden, Surrey.

#### INSTITUTIONS, ETC.

COLCHESTER, The Colchester and District Numismatic Society, c/o B. D. Hurrell Esq., 2 Sheriden Walk, Lexden, Colchester, Essex.

IPSWICH, The Ipswich Numismatic Society, 37 Berners Street, Ipswich, Suffolk.

Kansas, U.S.A., The Library, University of Kansas, Lawrence, Kansas, 66044, U.S.A.

KENT, The Medway Towns Numismatic Society, c/o E. H. Redfern, 'Perrydene' Pear Tree Lane, Shorne, Gravesend, Kent.

NOTTINGHAMSHIRE, The Numismatic Society of Nottinghamshire, c/o H. Pegg, Esq., 8 Devonshire Avenue, Beeston, Notts.

### CHANGES OF ADDRESS

#### ORDINARY MEMBERS

Brown, L. A., Esq., Imladris, Heath Ridge Green, Cobham, Surrey.

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MALCOLM, Flt. Lt., Officers' Mess, R.A.F., Kinloss, Morayshire, Scotland.

MORCOM, J., Esq., 24 Lawn Crescent, Kew, Richmond, Surrey.

Mossop, H. R., Esq., D.F.C., Willow Tree House, Marshchapel, Nr. Grimsby, Lincs.

Purvey, P. F., Esq., c/o B. A. Seaby Ltd., Audley House, 11 Margaret Street, London, WIN 8 AT.

REEVES, R. A., Esq., Little Orchard, Lamb Lane, Ponthir, Nr. Newport, Monmouth.

SEABY, H. A., Esq., Audley House, 11 Margaret Street, London, WIN 8 AT.

SMITH, R. I., Esq., Aynsome Manor Park, Cartmel, Nr. Grange-over-Sands, Lancs.

THOMSON, I. C., Esq., Flat 5, 558 Wilbraham Road, Chorlton cum Hardy, Manchester 21.

#### JUNIOR MEMBER

CLARKE, Mr. M. P., Proctors, Bradford Road, Sherborne, Somerset.

# INDEX

Accounts, 226.

Ancient British coins, five recent finds, 181.

Anglo-Saxon denominations and weights, historical problems of, 204.

- gold coins, 207.

Archibald, M. M., Attenborough, Notts., 1966 hoard, 50.

Athelstan, new variety of from Knowth, 17. ATKINSON, J., A new groat of Richard II, 189. Attenborough, Notts., 1966 hoard, 50.

excavations at, 79.

Bell, hawk, found at Attenborough (14th cent.), 82. BLUNT, C. E., and another, New type for Offa, 182. British West Africa, freak penny exhibited, 203.

Carolingian evidence for weight of Anglo-Saxon coins, 220.

CASTLE, S. A., Seven finds of 16–20th cent. coins, 174. Charles II Scottish silver coinage, 113.

Commentationes de nummis sæculorum ix-xi in Suecia repertis, reviewed, 195.

Commonwealth, evidence for the authenticity of the 1655 half-crown, 190.

Containers:

Jug from Attenborough, Notts. (14th cent.), 82. Pot from Malin, Co. Donegal (16th cent.), 108. Pot from Sheerness, Isle of Sheppey (17th cent.), 163.

Continental sterlings, unpublished, exhibited, 202,

Dolley, M., Anglo-Saxon pennies from Knowth, 16.

— and another, The coinages for Ireland of Henry VIII, 84.

 and another, Clonereen Bog, Co. Offaly, find of coins of Elizabeth I, 109.

 The 1912 find of pence of Eadgar and Edward the Martyr, 183.

— Anglo-Irish monetary policies c. 1150-1625, 223.

Eadgar, coin(s) of *BMC* found at Welwyn, Herts., 183. Eanred, silver penny of, 11.

Edward the Confessor, an overstruck penny of, 185. Edward III, coinage 1327–44, 32.

Exhibitions, 201.

Finds (including single finds):

(a) with Ancient British coins:
 Dragonby, Lincs., 181.
 Isle of Sheppey, 181.
 Owmby Cliff, Lincs., 181.
 Thistleton, Rutland, 181.

(b) with Anglo-Saxon coins:Bolton Percy, Yorks. (9th cent.), 201.Knowth Co. (10th cent.), 16.Oulton, Staffs. (11th cent.), 24.

Stafford (11th cent.), 22. Welwyn, Herts. (10th cent.), 183.

(c) with English coins (1066-c. 1603):
Attenborough, Notts. (13-14th cents.), 50.
Clogheen, Co. Tipperary (16th cent.), 108.
Cloncreen Bog, Co. Offaly (16th cent.), 109.
Colchester, Essex (13th cent.), 225.
Cople, Beds. (16-17th cents.), 174.
Harlaxton, Lincs. (16-17th cents.), 165.
Henry VIII-Edward VI in Ireland, 107.
Loch Doon, Kirkudbrightshire (13-14th cents.), 31.

Malin, Co. Donegal (16th cent.), 108. Oulton, Staffs. (11th cent.), 24. Ras Shamra, Syria (13th cent.), 188. Rayleigh Mount, Essex (12th cent.), 186. Sheerness, Isle of Sheppey (16–17th cents.), 163.

(d) with English coins (after c. 1603):
Cople, Beds. (16–17th cents.), 174.
Harlaxton, Lincs. (16–17th cents.), 165.
Newent, Glos. (18th cent.), 176.
Poringland, Norfolk (19th cent.), 177.
Seend, Wilts. (17–18th cents.), 175.
Sheerness, Isle of Sheppey (16–17th cents.), 163.
Tintwistle, Cheshire (19th cent.), 177.
Uffington, Lincs. (18–19th cents.), 176.
Wantage, Berks. (19–20th cents.), 178.
Westmancote, Worcs. (18th cent.), 166.

(e) with Scottish coins:
Attenborough, Notts. (13–14th cents.), 50.
Harlaxton, Lincs. (16–17th cents.), 165.
Loch Doon, Kirkudbrightshire (13–14th cents.), 31.

(f) with Irish coins:

Attenborough, Notts. (13th cent.), 50.
Ballinlough, Co. Meath (16th cent.), 108.
Clogheen, Co. Tipperary (16th cent.), 108.
Harlaxton, Lincs. (17th cent.), 165.
Henry VIII–Edward VI in Ireland, 107.
Loch Doon, Kirkudbrightshire (13th cent.), 31.
Rossnowlagh, Co. Donegal (16th cent.), 108.

(g) with Anglo-Gallic coins:Loch Doon, Kirkudbrightshire (14th cent.), 31.

(h) with foreign coins:
 Attenborough, Notts. (13–14th cents.), 50.
 Cloncreen Bog, Co. Offaly (16th cent.), 109.
 Loch Doon, Kirkudbrightshire (13–14th cents.), 31.

FREEDMAN, D. S., New evidence concerning the authenticity of the 1655 half-crown, 190.

George II and III, forgeries and evasions exhibited, 202.

V 1922/1927 penny exhibited, 203.

Gold and silver ratio in Anglo-Saxon England, 214.

GUNSTONE, A., and another, Cloncreen Bog, Co.

Offaly, find of coins of Elizabeth I, 109.

INDEX 231

HACKMAN, W. D., and another, The coinages for Ireland of Henry VIII, 84.

Henry IV, unusual number in Attenborough find, 55. — mule with Richard II, 54.

- VIII, Irish coinage, 84.

HODGKINSON, P. A., An overstruck penny of Edward the Confessor, 185.

Irish coinages of Henry VIII, 84.

James VI of Scotland, gold forty-shilling piece of, 193.

KENT, J. P. C., Three 17–18th cent. finds, 163. King, H. H., his services to the Society, 223.

Library accessions, 198.

Loch Doon treasure trove 1966, 31.

Loyn, H. R., review of *Commentationes de nummis* saeculorum ix-xi in Suecia repertis, 195.

Lyon, C. S. S., Presidential address, 204.

- Review of the year, 223.

Mancus, discussion on, 207.

Members, list of new, 228.

METCALF, D. M., The short cross coins in the Ras Shamra hoard of 1966, 188.

Mossop, H. R., Five recently found Ancient British coins, 181.

Muling, early use of the term, 156.

MURRAY, J. K. R., The Scottish silver coinage of Charles II, 113.

 The gold forty-shilling piece of James VI of Scotland, 193.

Northumbrian numismatic chronology in ix cent., 1. — kings ix cent., documentary evidence, 4.

Offa, new type for, 182.

Oulton (1795) hoard (11th cent.), 24.

PAGAN, H. E., Northumbrian numismatic chronology in ix cent., 1.

exhibits by, 201.

Peck, C. W., posthumous presentation of Sandford Saltus medal to, 201.

Porteous, J., his Coins in history reviewed, 196.

Coins of the Netherlands from 13–17th cents., 223.
 Proceedings, 200.

Review of the year, 223.

Richard II, large number York pence in Attenborough hoard, 52.

— mule with Henry IV, 54.

— a new groat of, 189.

RIGOLD, S. E., historical and archaeological background to a find of Stephen pence at Rayleigh Mount, 187.

Robert III halfpence in Attenborough hoard, 58. Robinson, P. H., The Stafford and Oulton hoards, 22. Roman pound, its weight, 205.

Sceattas and Thrymsas, identification of, 216. Scottish silver coinage of Charles II, 113.

SEAMAN, R., A find of Stephen coins at Rayleigh Mount, 186.

Shilling, mark and ore, 209.

- and wergild, 210.

SHORTT, H. de S., review of Reading and Stockholm, Sylloge, 196.

SLAYTER, W., review of Seventeenth century tradesmen's tokens, 197.

Spanish dollars acquired by Britain 1799–1805, origin of, 167.

Specific gravity determination of Henry VIII Irish coins, 97.

Spence, Thomas, dies of, 126.

— countermarking by, 154.

Spufford, P., review of Coins in history, 196.

Stafford (1800) hoard (11th cent.), 22.

Stephen, find of coins of at Rayleigh Mount, 186.

STEWART, I., and others, The Loch Doon treasure trove, 31.

Styca chronology—proposed redating, 1.

— two lead weights at Oslo with stycas inserted, 202. *Sylloge*, Reading and Stockholm, reviewed, 196.

TATLER, G., and others, Loch Doon treasure trove, 31.

THOMPSON, J. D. A., The origin of Spanish dollars acquired by Britain, 1789–1805, 167.

THOMPSON, R. H., The dies of Thomas Spence (1750–1814), 126.

Thrymsas and sceattas, identification of, 216. Trial plates for Henry VIII coins, 92.

Van der MEER, G., and another, A new type for Offa, 182.

Wetton, J. L., his Seventeenth century tradesmen's tokens reviewed, 197.

William I, mule types I/II, 28.

Winstanley, E. J., presentation of Sandford Saltus medal to, 200.

WOODHEAD, P., and others, Loch Doon treasure trove,

York, 9th cent. archbishops, 5.

- Edward III coinage at, 1327-44, 33.







